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Result
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Maximum Match 100%
Listing first 45 summaries
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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PCT-US95-09448-20
US-08-107-669D-27
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US-09-647-468-107
US-09-647-468-1125
US-08-425-336-125
US-08-488-113B-125
US-08-488-113B-125
US-08-477-494B-125
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US-08-488-113B-147
US-08-488-113B-147
US-08-488-113B-147
US-08-488-113B-148
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Sequence 20, Appl
Sequence 27, Appl
Sequence 182, App
Sequence 182, App
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Sequence 125, App
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Sequence 65, Appl
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Sequence 125, App
Sequence 125, App
Sequence 125, App
Sequence 125, Appl
Sequence 127, Appl
Sequence 128, Appl
Sequence 147, Appl
Sequence 148, Appl
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; MOLECULE TYPE: US-08-290-592E-20
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US-08-290-592E-20
Query Match
Best Local Similarity
Matches 95; Conserv
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                                                                                                                                      APPLICATION NUMBER: US/08/290,592E
PILING DATE: August 15, 1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/813,372
PILING DATE: December 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Olstein, Elliot M.
REGIGTRATION NUMBER: 24,025
REFERENCE/DOCKET NUMBER: 469201-257
TELECOMMUNICATION INFORMATION:
TETTENGONEY. 301-304-1700
                                                                                               TELEPHONE: 201-994-170
TELEPAX: 201-994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                              ZIP: 07068

COMPUTER READABLE FORM;

MEDIUM TYPE: 3.5 INCH DISKET

COMPUTER: IBM PS/2

OPERATING SYSTEM: MS-DOS

SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 49
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Human Murine TITLE OF INVENTION: Respiratory
                                                                                                                                                                                                                                                                                                                                           STREET: 6 BECKER FACITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
                                                                  TYPE: AMINO ACID TOPOLOGY: LINEAR
                                                                          TYPE: AMINO ACIDS
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 90.9%;
ilarity 88.8%;
Conservative
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Human Murine Chimeric Antibodies
Respiratory Syncytical Virus
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US-09-136-389-148
US-09-610-838-147
US-09-610-838-147
US-09-711-485-147
US-09-711-485-148
US-09-711-485-148
US-09-647-468-180
US-08-875-811-41
US-08-875-811-45
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-875-811-43
US-08-875-811-43
US-08-875-811-43
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 Score 510; DB 2;
Pred. No. 4.2e-44;
8; Mismatches 4
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; MOLECULE TYPE: PROTEIN
PCT-US95-10053-17
           Sequence 20, Application PC/TUS9609448
GENERAL INFORMATION:
APPLICANT: UDINSON, L.
TITLE OF INVENTION: Human Murine C
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GENERAL INFORMATION:
APPLICANT: JOHNSC
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NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/290,592 FILING DATE: August 15, 1994 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: December 23, 1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5 INCH DISKETTE
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TITLE OF INVENTION: Human Murine Chimeric Antibodies Against Respiratory Syncytica
                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 46
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                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
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                                                                                                                                                61 RFSGSGSGODYTLTISSLOPEDFATYYCLOYDEFPYTFGGGTKVEIK 107
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: NEW JERSEY
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Human Murine Chimeric Antibodies Against Respiratory Syncytics
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Pred. No. 4.2e-44;
8; Mismatches 4,
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                                                                                                                                                                                                                                     Patent No. 5766886
GENERAL INFORMATION:
APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains (as NUMBER OF SEQUENCES: 67
                                                                                                                                                                                                                                                                                                                                  Sequence 27, Application US/08107669E Patent No. 5766886
                              ZIP: ..... united States of Americal ZIP: 2005-1934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release "
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
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PRIOR APPLICATION UNMBER: 08/290
APPLICATION NUMBER: 15, 19
APPLICATION NUMBER: 07/813
FILING DATE: December 23,
ATTORNEY/AGENT INFORMATION:
NAME: HERRON, CHARLES J.
REGISTRATION NUMBER: 28,01
                     SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: LI
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   APPLICATION NUMBER:
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SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
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ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                   CITY: Washington
                                                                                                                                                                                                                          ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: ROSELAND
STATE: NEW JERSEY
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                                                                                                                                         United States of America
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ilarity 88.8%;
Conservative
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UMBER: 07/813,372
US/08/107,669D
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Pred. No. 4.2e-44;
8; Mismatches 4
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/I

PCT/US92/10906

PRIOR APPLICATION DATA:

FILING DATE:

13-AUG-1993

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                                                                                                                                                                                                                                      ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTMARBE: PAtentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,788A
FILING DATE: 07-TUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 27, Application US/08472788A Patent No. 5770196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local !
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INFORMATION FOR SEQ ID NO:
                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/082,842
FILING DATE: 23-UN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 33,851
REFERENCE/DOCKET NUMBER: 0610.1000001/MAC
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
                                                  FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 1100
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                                                                                         APPLICATION NUMBER: US 07/808,464
                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
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95; Conserv
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amino acid
                              Cimbala, Michele A.
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1100 New York Ave., N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Studnicka, Gary M.
VENTION: Modified Antibody Variable Domains
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                                                                       13-DEC-1991
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0610.1000003
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Pred. No. 2.6e-43;
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US-08-477-531B-27
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                                                     TELEPHONE: 202/371-2600
TELEPAX: 202/371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acide
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                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/107,669
FILING DATE: 13-AUG-1993
PRIOR APPLICATION NUMBER: PCT/US92/109
APPLICATION NUMBER: PCT/US92/109
FILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/808,46:
APPLICATION NUMBER: US 07/808,46:
APPLICATION NUMBER: US 07/808,46:
APPLICATION NUMBER: 33,851
ATTORNEY/AGENT INFORMATION:
NAME: Michele A. Cimbala
REGISTRATION NUMBER: 33,851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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                                                                                                                                         REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
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MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Modified Antibody Variable Domains (as amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/477,531B FILING DATE: 07-JUN-1995 CLASSIFICATION: 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
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TELEFAX: 202/371-2540
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5. 5821123
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                                  amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Sterne, Kessler, Goldstein and Fox P.L.L.C. 1100 New York Ave., N.W., Suite 600
                                                         107 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                United States of America
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                                                                                                                                                                                                                                                                                      US 07/808,464
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Pred. No. 2.6e-43;
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Local

Similarity

89.5%;

Length 107;

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; MOLECULE TYPE: protein
US-08-082-842A-27
                                                                                                                                                 Query Match 89.5%;
Best Local Similarity 88.8%;
Matches 95; Conservative
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US-08-082-842A-27
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APPLICATION NUMBER: US/08/082,842A
FILIDATION NUMBER: US/08/082,842A
FILIDATION DATA:
FILIDATION SON
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/US92/10906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Studni
                                                                                                                                                                                                                                                                                                                     NAME: Cimbala, Michele A.
REGISTRATION NUMBER: 33,851
REFERENCE/DOCKET NUMBER: 0610.1000002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
TELEPAX: 202/371-2540
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US92/1090
FILLING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/808,464
FILLING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                        61
                                              61 RFSGSGSGODYTLTISSLOPEDFATYYCLOYDEFPYTFGGGTKVBIK 107
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                           RFSGSGSGTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
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    Application US/08082842A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Sterne, Kessler,
1100 New York Ave.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                  27:
                                                                                                                                                    6
                                                                                                                                                             Score 502; DB 2;
Pred. No. 2.6e-43;
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; Pred. No. 2.6e-43;
. Mismatches 6;
                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goldstein and Fox P.L.L.C. N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                 6,
                                                                                                                                                                           Length 107;
                                                                                                                                              Indels
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FILE REFERENCE: 053466/0289

CURRENT APPLICATION NUMBER: US/09/647,468

CURRENT FILING DATE: 2000-09-29

PRIOR APPLICATION NUMBER: PCT/JP99/01768

PRIOR FILING DATE: 1999-04-02

PRIOR APPLICATION NUMBER: JP 10-91850

PRIOR FILING DATE: 198-04-03

NUMBER OF SEQ ID NOS: 183

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 182

LENGTH: 127
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GENERAL INFORMATION.

APPLICANT: SATO, KOH

APPLICANT: ADACHI, HIDEKI

APPLICANT: YABUTA, NAOHIRO

TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTIFIE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBOTY

FILLE REFERENCE: 053466/0289

CURRENT FILLING DATE: 2000-09-29

PRIOR APPLICATION NUMBER: US/09/647,468

PRIOR APPLICATION NUMBER: D7/1099/01768

PRIOR APPLICATION NUMBER: D7/1099/01768

PRIOR APPLICATION NUMBER: J99-04-02

PRIOR APPLICATION NUMBER: J99-04-02

PRIOR APPLICATION NUMBER: J99-04-03

NUMBER OF SEQ ID NOS: 183

NUMBER OF SEQ ID NOS: 183

NUMBER OF SEQ ID NOS: 183
                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Amino aci; OTHER INFORMATION: sequence coding of version "b1" of humainzed; OTHER INFORMATION: chain V region
US-09-647-468-182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-09-647-468-182
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ORGANISM: Artificial Sequence
PEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Amino acid
OTHER INFORMATION: sequence coding of version "b1" of humainzed L
OTHER INFORMATION: chain V region
US-09-647-468-107
                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 182, Application US/09647468
PATENT NO. 6677436
GENERAL INFORMATION:
APPLICANT: SATO, KOH
APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NAOHIRO
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTOR (TF)
TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-647-468-107
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                                                                                                                                                                                         LENGTH: 127
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH: 107
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                            88.9%;
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Score 499; DB 4; Length 127; Pred. No. 6.5e-43; 3; Mismatches 8; Indels
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Pred. No. 5.3e-43;
3; Mismatches 8
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ANTIBODY
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US-08-425-336-125
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                                                                                                                                                                                                                                                                         TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, v
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,336
FILING DATE: 18-APR-1995
CLASSIFICATION: 530
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APPLICATION NUMBER: US 07/787,567
PILING DATE: 04-NOV-1991
ATTORNEY/AGENT INFORMATION:
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APPLICANT: Carroll, Stephen F.
APPLICANT: Studnika, Gary M.
TITLE OF INVENTION: Immunotoxins Comprising Ribsome-Inactivating
TITLE OF INVENTION: Proteins
                                                                                                                                                                                                                   MOLECULE TYPE:
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TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 08/064,691
FILING DATE: 12-MAY-1993
APPLICATION NUMBER: US 07/901,707
FILING DATE: 19-JUN-1992
                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Meyers, Thomas C. P.36,989
                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: P-
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                                                                                                                                                h 88.8%;
Similarity 89.7%;
                                                                                    DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
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RFSGSGSGTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
                               RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
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6300 Sears Tower,
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312/474-0448
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                                                                                                                                                                                                                                                                                                                       125:
                                                                                                                                                                                                                                                                                                                                                                                                        31394
                                                                                                                              Score 498; DB 1; Length 107; Pred. No. 6.7e-43; Mismatches 8; Indels
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South Wacker Drive
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US-08-488-113B-125
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US-08-488-113B-125
                                                                                                                                      Query Match
Best Local Similarity
Matches 96; Conserv
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APPLICATION NUMBER: US/08/488,113B
FILING DATE: 07-UUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/425,336
FILING DATE: 18-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/064,691
FILING DATE: 12-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/90
FILING DATE: 19-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/78
FILING DATE: 04-NOV-1991
ATTORNEY/AGENT INFORMATION:
NAME: MCNICHOLAS, Janet M.
                                                                                                                                                                                                                                                                                                                                 TELEX: 650 388-1248
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/707-8889
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APPLICANT: Carroll, Stephen I
APPLICANT: Studnika, Gary M.
                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER:
FILING DATE: 09-DEC-
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                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                              ENGTH:
61
                             61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVBIK 107
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: Illinois
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                                                                                        DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
RFSGSGSGTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                  DIOMTOSPSSLSASVGDRVTITCRASODINSYLSWFOOKPGKAPKTLIYRANRLESGVPS
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                                                                                                                                                                                                                                                                                              107 amino acids
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                                                                                                                                                      Score 498; DB 1;
Pred. No. 6.7e-43;
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                                                                                                                     Query Match
Best Local Similarity
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US-08-477-484B-125
                                                                                                              Matches
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
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                                                                                                                                                                                 MOLECULE TYPE:
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PRIOR APPLICATION DATA:
US 07/901,707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 12-MAY-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/988,430
                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 11
FELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 19-JUN-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 530
PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
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CURRENT APPLICATION DATA
APPLICATION NUMBER: U
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                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 01
FILING DATE: 18-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
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       61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                              96;
                                         DIQMTQSPSSLSASVEDRVTITCRASQDINSYLSWFQQKPGKAPKTLIVRANRLESGVPS
                                                              DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAFKTLIYRANRLVDGVPS
                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                   McNicholas, Janet M.
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Illinois
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                                                                                                         Conservative
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500 West Madison Street, 34th floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Studnika, Gary M.
WENTION: Immunotoxins Comprising Ribosome-Inactivating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08477484B
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IBM PC compatible
                                                                                                                                                                                protein
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                                                                                                                    88.8%;
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                                                                                                                  Score 498; DB 1;
Pred. No. 6.7e-43;
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                                                                                                     Mismatches
                                                                                                                                Length 107;
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US-08-472-788A-87
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                                                                                                                                                                                   Sequence 87, Application US/08472788A Patent No. 5770196
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US-08-107-669D-65
                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                 GENERAL INFORMATION:
APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
NUMBER OF SEQUENCES: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08,

PILING DATE: 13-AUG-1993

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

ARBGISTRATION NUMBER: 33,85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 202/371-2540 INFORMATION FOR SEQ ID NO:
                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
CITY:
STATE: D.C.
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                    CITY: Washington
                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Studnics
                                             ADDRESSEE: Sterne, Kessler, Goldstein and Fox P.L.L.C. STREET: 1100 New York Ave., N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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5. 5766886
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1100 New York Ave.,
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WENTION: Modified Antibody Variable Domains (as amended)
SEQUENCES: 67
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Pred. No. 6.7e-43;
3; Mismatches 8
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20005-3934

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:

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MEDIUM TYPE: Floppy

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RESULT 15
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Best Local Similarity 89.7%;
Matches 96; Conservative
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APPLICANT: Studni
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                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08
PILING DATE: 07-UN-1995
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
                                                                                                                                                                       ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 33,851
REFERENCE/DOCKET NUMBER: 0610.1000003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains (as amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
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                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                               STREET: 1100 New CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 202/371-2540
APPLICATION NUMBER:
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                                                                                                                                                                                                                                 United States of America
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Best Local
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APPLICATION NUMBER: US 0.
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 202/371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 13-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Michele A. Cimbala REGISTRATION NUMBER: 33, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/I
FILING DATE: 14-DEC-1992
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                                                                                                                                           Match 88.8%;
Local Similarity 89.7%;
es 96; Conservative
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                    61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                   1 DIOMTOSPSSLSASVGDRVTITCRASQDINSYLSWFQQKPGKAPKTLIYRANRLESGVPS
RESGSGSGTDYTLTISSLOYEDEGIYYCOQYDESPWTEGGGTKLEIK 107
                                                                                        DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
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Pred. No. 6.7e-43;
                                                                                                                                             8; Indels
                                                                                                                                                                             Length 107
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Gaps

60 60 0 APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: Cimbala, Michele A.

APPLICATION NUMBER: PCT/US92/10906 FILING DATE: 14-DEC-1992 PRIOR APPLICATION DATA:

FILING DATE: 23-JUN-PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/082,842 FILING DATE: 23-JUN-1993

PRIOR APPLICATION DATA:

FILING DATE: 07-JUN-1995 CLASSIFICATION: 424

APPLICATION NUMBER:

US/08/472,788A

Search completed: December 29, 2004, 18:09:14 Job time : 19.4646 secs

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Maximum DB
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           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
       Score
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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Gapop 10.0 , Gapext 0.5
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| RESULT 2 US-09-647-468; Sequence 14; Patent No. (; GENERAL INF.; APPLICANT: APPLICANT: APPLICANT: APPLICANT: | Query Manager Loo<br>Best Loo<br>Matches<br>Qy<br>Db<br>Qy   | NUMBE<br>SOFTW<br>SEQ ID<br>LENG<br>TYPE<br>ORGA<br>FEAT<br>OTHE<br>OTHE | RESULT 1 US-09-647-468: US-09-647-468: Sequence 139 Patent No. 61 GENERAL INFO APPLICANT: APPLICANT: APPLICANT: APPLICANT: FITLE OF IN FITE OF IN FITE REFEREL CURRENT APPLICANT APPLICANT PRIOR APPLICANT PRI |            | 4 4 4 4 4 4 3 3 3 3 2 1 0 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8   |
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| -140<br>0, Appl<br>6677436<br>5ATO,<br>ADACH<br>YABUTIC  | 107;<br>107;<br>1 E<br>1 E<br>1 E<br>61 S  | F SEQ ID PATENT! 119 118 IN: Mus sp N: NFORMATIC NFORMATIC 68-139        | 139<br>677<br>AD<br>SAIC<br>VENT<br>VENT<br>VENT<br>CAIT<br>CAIT<br>CAIT<br>CAIT<br>CAIT<br>CAIT<br>CAIT<br>CAI  |            | 4990.5<br>4900.5<br>75.<br>4900.5<br>75.<br>4900.5<br>75.<br>4900.5<br>75.<br>488.5<br>77.<br>488.7<br>74.<br>488.7<br>74.<br>488.7<br>74.<br>488.7<br>74.<br>488.7<br>74.<br>488.7<br>74.<br>74.<br>74.<br>74.<br>74.<br>74.<br>74.<br>7   |
| ation<br>H<br>HIDE<br>NAOH:<br>HUMA  | 86.53<br>89.93<br>tive<br>VKPGAS<br>VKPGAS<br>VKPGAS<br>VDKSSS   | S: 183<br>Ver. 2.<br>Amino<br>mouse                                      | 1010 4 H H H H   |            | 7 116 3<br>7 116 3<br>7 115 1<br>7 135 1<br>7 135 1<br>7 135 1<br>7 135 3<br>8 297 4<br>4 297 4<br>137 2<br>7 137 2<br>7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7  |
| )647468<br>ANTIBODY  | ; Score 56; Pred. No 4; Misma VKVSCKASGYA  | 1<br>acid sequence<br>monocional ant                                     | ion US/09647468  IDEKI ACHIRO WANIZED ANTIBODY AGAINS PROCESS OF PRODUCTION OF 6/0289 UMBER: US/09/647,468 2000-09-29 BER: PCT/JP99/01768 99-04-02 BER: JP 10-91850 98-04-03   | ALIGNMENTS | US-08-484-<br>US-07-634-<br>US-08-477-<br>US-08-477-<br>US-08-487-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-488-<br>US-08-720-<br>US-08-714-<br>US-08-475-<br>US-08-475-<br>US-08-475-  |
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| TISSUE   | 5; DB 4; Length 118; 11e-46; Indels 1; Gap ches 7; Indels 1; Gap TNYNMYWVKQSHGKSLEWIGYIDPYYGDP  -             TDYNMYWVKQSHGKSLEWIGYIDPYNGGT TDYNMYWVKQSHGKSLEWIGYIDPYNGGT TDYNMYWVKQSHGKSLEWIGYIDPYNGGT TDYNMYWVKQSHGKSLEWIGYIDPYNGQGTTLTVS DSAVYYCARRGGE-GYYFDYWGQGTTLTVS | ~ <  | HUMAN TISSUE E   |            | Sequenc   |
| FACTOR (TF)  | ; Gaps PYYGDPG       PYNGGTI TTLTVSS   | of anti-TF   | FACTOR (TF)  |            |   |
| מאב (  | 1;<br>¥ 60<br>119<br>119   |  | ) AND  |            | Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl<br>Appl  |

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TYPE: PRT
ORGANIEM: MLS sp.
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Amino acid
OTHER INFORMATION: sequence coding for H chain V region of ant-TP
OTHER INFORMATION: mouse monoclonal antibody ATR-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-647-468-153
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Best Local Similarity
                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 183
SOFTWARE: PatentIn Ver. 2.
SEQ ID NO 153
LENGTH: 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTOR (7 TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY FILE REFERENCE: 053466/0289
CURRENT APPLICATION NUMBER: US/09/647,468
CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR PILING DATE: 1999-04-02
PRIOR PILING DATE: 1999-04-02
PRIOR PILING DATE: 1999-04-02
PRIOR PILING DATE: 1999-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SATO, KOH
APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NAOHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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SEQ ID NO 140
LENGTH: 118
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OTHER INFORMATION: 1
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CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                            61 SQKFKGKATLTVDKSSSTAYMHINSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                          107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE:
                                                                                            20
                                                                                                    1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYMVKQSHGKSLEWIGYIDDYYGDPGY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
NŐKFKGKÁTLTVDKŚSŚTÁFWHLNSLTSEDSAVYYCARGGE-GYYFDYWGQGTTLTVSS 137
                                                                         EIQLQQSGPELVKPGASVKVSCKASGYSFTDYNMYWVKQSHGKSLEWIGYIDPYNGGTIY 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVXQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EIQLQOSGPELVKPGASVKVSCKASGYSFTDYNMYMVKQSHGKSLEWIGYIDPYNGGTIY 60
                                                                                                                                                                  Conservative
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                                                                                                                                                                                    86.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86.5%;
                                                                                                                                                       Score 560.5; DB 4; Length 137;
Pred. No. 1.3e-46;
4; Mismatches 7; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 560.5; DB 4;
Pred. No. 1.1e-46;
4; Mismatches 7;
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RESULT 5
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APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NAOHIRO
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAIN
TITLE OF INVENTION: PROCESS OF PRODUCTION (
FILE REFERENCE: 05346/0289
CURRENT APPLICATION NUMBER: US/09/647,468
CURRENT FILING DATE: 2000-09-29
CURRENT FILING DATE: 2000-09-29
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Matches 107;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Smith,
         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR PILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 667743
CURRENT APPLICATION DATA:
                                                                                                                                                                        NUMBER OF SEQUENCES: 71
CORRESPONDENCE ADDRESS:
ADDRESSEB: IGEN, Inc.
STREET: 1530 East Jefferson St.
                                                                                                                                                                                                                                  APPLICANT: Kenten, John H.
APPLICANT: Martin, Mark T.
APPLICANT: Minis, Richard C.
APPLICANT: Williams, Richard C.
APPLICANT: Williams, Richard O.
TITLE OF INVENTION: Catalytic Antibodies using Phage Technology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: Amino acid OTHER INFORMATION: sequence coding for H chain V region of ant-TF OTHER INFORMATION: mouse monoclonal antibody ATR-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Mus sp.
FEATURE:
                                                                                                                                              ADDRESSEE: IGEN,
STREET: 1530 Eas
CITY: Rockville
STATE: MD
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                           COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 55, 55885
Wo. 5855885
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80 NOKEKGKATLTVDKSSSTAFWHLNSLTSEDSAVYYCARGGE-GYYEDYWGQGTTLTVSS 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 BIQLQQSGPELVKPGASVKVSCKASGYSFTDYNMYWVKQSHGKSLEWIGYIDPYNGGTIY 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08273146
                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                       Chiswell, David
Darsley, Michael J.
Fitzgerald, Kevin
                                                                                                                                                                                                                                                                                                                                                                                                         McCafferty,
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                                                                                                                                                                                                                                                                                                                                                                                                                              Rodger
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
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Pred. No. 1.3e-46;
4; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTIBODY AGAINST HUMAN TISSUE FACTOR (TF)
OF PRODUCTION OF THE HUMANIZED ANTIBODY
         Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
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CLASSIFICATION:

FILING DATE: 14-JUL-1994

APPLICATION NUMBER: US/08/273,146

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RESULT 6
US-09-647-468-144
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                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. SEQ ID NO 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. 6677436
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SATO, KOH
APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NACHIRO
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTOR (TF) AND
TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY
FILE REFERENCE: 053466/0289
CURRENT APPLICATION NUMBER: US/09/647,468
CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR PILING DATE: 1999-04-03
PRIOR FILING DATE: 1999-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
                                                                                                                                                                                                                                                                                                                          ORGANISM: Mus sp.
                                                                                                                                                                                                                                                                FEATURE: OTHER INFORMATION: Amino acid sequence of H chain V region of anti-TF OTHER INFORMATION: monoclonal antibody ATR-8
                                                                                                                                                                                                                                                                                                                                                                         ENGTH: 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 301-984-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Ryan, John W.
REGISTRATION NUMBER: 33,771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102;
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61
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                                        61 SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFD-YWGQGTTLTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                      1 BIQLQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
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NQKFNDKATLTVDKSSSTAFMHLNSLTSEDSAVYYCAR--GFYYDYDCYWGQGTLVTVSA 118
                                                                               DIQLQQSGPELVKPGASVKVSCKASGYSFTDYNIFWVKQSHGKSLEWIGYIDFYTGGTGY
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                                                                                                                                                                 Conservative
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                                                                                                                                                                                  79.1%; Score 512.5; DB 4; Length 81.7%; Pred. No. 4.4e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55:
                                                                                                                                                               10; Mismatches
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RESULT 7

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; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
; OTHER INFORMATION: sequence coding for H chain V region of ant-TF
; OTHER INFORMATION: mouse monoclonal antibody ATR-8
US-09-647-468-158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-137-117D-27
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CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
SOPTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; SEQ ID NO 158
; LENGTH: 137
; TYPE: PRT
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Patent No. 5795965
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Patent No. 667743
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APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NAOHIRO
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTOR (TF) AND
TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY
FILE REFERENCE: 053466/0289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Mus sp.
APPLICATION NUMBER: US/08/137,117D FILING DATE: 20-DEC-1993
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/JP92/00544
FILING DATE: 24-APR-1992
                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: BENDÍG, Mary
APPLICANT: JONES, Sceven
APPLICANT: SALDANHA, JOSE
TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN
TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR
                                                                                                                                             SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                              ZIP:
                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                        STATE: D.C
                                                                                                                                                                                                                                                                                                                                                            CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80 NÓKFNDKATLTVDKSSSTAFWHLNSLTSEDSÁVYYCAR--GFYYDYDCYWGQGTLVTVSA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYMVKQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98;
                                                                                                                                                                                                                                                                                           20007-5109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                h 79.1%; Score 512.5; DB 4; Length 137;
Similarity 81.7%; Pred. No. 5.3e-42;
98; Conservative 10; Mismatches 9; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/08137117D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09647468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSUCHIYA, Masayuki
SATO, Koh
                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                158
                                                                                                                                                                      Version #1.
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APPLICATE: 24-A...
FILING DATE: 24-A...
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-32084
APPLICATION 19-FEB-1992
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                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IST MC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 904136
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
LENGTH: 135 amino acids
                                                                                                                                                              CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SALDANHA, JOSE
TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN
TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR
NUMBER OF SEQUENCES: 158
                                                                         APPLICATION NUMBER: US/08/137,117
FILING DATE: 20-DEC-1993
APPLICATION NUMBER: WO PCT/JP92/00544
FILING DATE: 24-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: WEGNER, Harold C.
REGISTRATION NUMBER: 25,258
REFERENCE/DOCKET NUMBER: 534
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 3-FILING DATE: 25-APR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 3000 x or CITY: Washington
                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 20007-5109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: JP 4-32084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27, Application US/08436717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h 78.6%; Score 509.5; DB 1; Length 135; Similarity 80.7%; Pred. No. 1e-41; 96; Conservative 11; Mismatches 9; Indels 3
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3000 K Street, N.W., Suite 500
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JONES, Steven
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// MOLECULE TYPE:
US-08-672-345C-105
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Query Match
Best Local Similarity
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Matches
                                                                                                                                 TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acid
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INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 135 amino acids
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 05
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 24-JUN-19:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 53
TELECOMMUNICATION INFORMATION:
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FILING DATE: 25-APR-1
ATTORNEY/AGENT INFORMATI
                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York
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                                                                                                                 amino acid
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                                                                                                                               116 amino acids
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                                                                DNA (genomic)
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N: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78.6%; Score 509.5; DB 2; 80.7%; Pred. No. 1e-41; tive 11; Mismatches 9;
                                                                                                                                                                                                                                                                                                                               US/08/672,345C
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77.7**%;** 79.8**%;** 

Score 503.5; DB 2; Pred. No. 3.2e-41;

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; OTHER INFORMATION: ; OTHER INFORMATION: US-09-647-468-143
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US-09-214-095D-90
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                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 053466/0289
CURRENT APPLICATION NUMBER: US/09/647,468
CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-214-095D-90
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      Best Loc
Matches
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GENERAL INFORMATION:
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                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 143
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SATO, KOH
APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NAOHIRO
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FACTOR (TF)
TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Landry, Donald TITLE OF INVENTION: ANTI-FILE REFERENCE: 51400-A-FILE REFERENCE: 51400-A-FIL
                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Mus sp.
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TYPE: PRT
ORGANISM: Murine
                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                       LENGTH: 118
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      Conservative
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                                                                                                                                                                     Amino acid
monoclonal
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79.8%;
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Pred. No. 3.2e-41;
   Score 503.5; DB 4;
Pred. No. 3.2e-41;
1; Mismatches 10;
                                                                                                                                                           sequence of H chain V region antibody ATR-7
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APPLICANT: ADACHI, HIDEKI
APPLICANT: ADACHI, HIDEKI
APPLICANT: ADACHI, HIDEKI
APPLICANT: YABUTA, NACHIEM
TITLE OF INVENTION: HUMANIZED ANTIBODY AGAINST HUMAN TISSUE FAC
TITLE OF INVENTION: PROCESS OF PRODUCTION OF THE HUMANIZED ANT
FILE REFERENCE: 053466/0289
CURRENT APPLICATION NUMBER: US/09/647,468
CURRENT FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR FILING DATE: 1999-04-02
PRIOR FILING DATE: 1998-04-03
NUMBER: OF SEQ ID NOS: 183
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US-08-672-345C-14
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US-09-647-468-157
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Matches
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GENERAL INFORMATION:
APPLICANT: Landry Donald, W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 157
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COUNTRY: USA
ZIP: 10036
CMPUTER READABLE FORM:
MEDIUM TYPB: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Description of Artificial Sequence: Amino acid OTHER INFORMATION: sequence coding for H chain V region of ant-TF OTHER INFORMATION: mouse monoclonal antibody ATR-7
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                                                                                                                                                                                                                                                                      APPLICANT: Landry Donald, W.
TITLE OF INVENTION: ANTI-COCAINE CATALYTIC ANTIBODY
                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                           STREET:
                                                                                                                                                             STATE:
                                                                                                                                                                           CITY: New York
                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 DIQLQQSGPELVKPGSSVKVSCKASGYSFPDYNIFWVKQSHGKSLEWIGYIDPYTGGTGY
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1185 Avenue of the Am
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80.0%;
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Pred. No. 3.9e-41;
.1; Mismatches 10
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                       Version #1
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Page 6
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Search completed: December 29, 2004, 18:08:58 Job time : 22.5354 secs
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TYEB: PRT
; ORGANISM: Murinae gen. sp.
US-09-214-095D-14
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US-09-214-095D-14
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NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 0575/51400

TELECOMMUNICATION INFORMATION:

TELEPHONE: 212-278-0400

TELEPAX: 212-391-0525

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
TYPE: amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                  Query Match 76.9%; Score 498.5; DB 3; Length 116; Best Local Similarity 79.7%; Pred. No. 9.6e-41; Matches 94; Conservative 10; Mismatches 11; Indels 3
                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                             Sequence 14, Application US/09214095D
Patent No. 6280987
GENERAL INFORMATION:
APPLICANT: Landry, Donald
TITLE OF INVENTION: ANTI-COCAINE CATALYTIC ANTIBODY
FILE REFERENCE: 51400-A-PCT-US
CURRENT APPLICATION NUMBER: US/09/214,095D
CURRENT FILING DATE: 1999-07-19
NUMBER OF SEQ ID NOS: 121
                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
SEQ ID NO 14
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Best Local S
Matches 94
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94;
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                                                           61 NQKFKGRATLTVDKSSNTAFMHLNSLTSEDSAVYYCARGGGL---FAYWGQGTLVTVS 115
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76.9%; Score 498.5; DB 2; Length 116;
Similarity 79.7%; Pred. No. 9.6e-41;
94; Conservative 10; Mismatches 11; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SQKFKGKATLTVDXSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVS 118
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Result
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Maximum Match 100%
Listing first 45 s
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Maximum DB
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Perfect score:
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seq length: 0
seq length: 2000000000
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Gapop 10.0 ,
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777.5
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Copyright (c) 1993 - 2004 Compugen Ltd.
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US-08-436-717-102
US-08-436-717-100
US-08-137-117D-100
US-08-137-117D-100
US-08-436-717-100
US-08-436-717-728-57
US-07-634-278-73
US-08-477-728-73
US-08-477-040-57
US-08-487-200-73
US-08-487-200-73
US-08-488-237-73
US-08-488-537-73
US-08-488-537-73
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US-08-488-537-73
US-08-487-200-55
US-08-487-200-59
US-08-487-200-59
US-08-487-200-59
US-08-488-138-169
US-08-488-138-169
US-08-488-1138-169
US-08-488-1138-169
US-08-488-1138-169
US-08-472-788A-86
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               US-08-477-531B-55
US-08-646-360-169
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             Sequence 102, App
Sequence 41, Appl
Sequence 41, Appl
Sequence 100, App
Sequence 100, App
Sequence 57, Appl
Sequence 58, Appl
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US-08-137-117D-102
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| 75.2              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              | 75.3              |
| 117               | 139               | 139               | 139               | 139               | 135               | 135               | 135               | 135               | 135               | 135               | 116               | 116               | 116               | 116               | 116               | 116               | 116               |
| W                 | Δ                 | 4                 | 4                 | 4.                | w                 | N                 | μ                 | _                 | ۳                 | -                 | 4                 | w                 | w                 | w                 | w                 | w                 | w                 |
| US-08-525-539A-78 | US-09-269-921-128 | US-09-269-921-125 | US-09-355-925-8   | US-09-355-925-7   | US-08-484-537-19  | US-08-303-569B-31 | US-08-487-200-19  | US-08-474-040-19  | US-08-477-728-19  | US-07-634-278-19  | US-09-711-485-169 | US-09-610-838-169 | US-08-484-537-5   | US-09-136-389-169 | US-08-839-765-169 | US-09-393-409-1   | US-08-934-841-1   |
| Sequence 78, Appl | Sequence 128, App | Sequence 125, App | Sequence 8, Appli | Sequence 7, Appli | Sequence 19, Appl | Sequence 31, Appl | Sequence 19, Appl | Sequence 19, Appl | Sequence 19, Appl | Sequence 19, Appl | Sequence 169, App | Sequence 169, App | Sequence 5, Appli | Sequence 169, App | Sequence 169, App | Sequence 1, Appli | Sequence 1, Appli |

ALIGNMENTS

## SOPTWARE: PATENTIA Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/137,117D FILING DATE: 20-DEC-1993 CLASSIFICATION: 530 PRIOR APPLICATION DATA: APPLICATION NUMBER: WO PCT/JP92/00544 FILING DATE: 24-APR-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: UP 4-32084 FILING DATE: 19-FEB-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: JP 4-32084 FILING DATE: 19-FEB-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: JP 3-95476 FILING DATE: 25-APR-1991 ATTORNEY/AGENT INFORMATION: NAME: WEGNER, HATOId C. REGISTRATION NUMBER: 25,258 Sequence 102, Application US/08137117D Patent No. 5795965 TELEFAX: (202)672-539: TELEX: 904136 INFORMATION FOR SEQ ID NO: GENERAL INFORMATION: COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IEM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS CORRESPONDENCE ADDRESS: ADDRESSEE: Foley & Lardner STREET: 3000 K Street, N.W., Suite 500 SEQUENCE CHARACTERISTICS: LENGTH: 135 amino acid REFERENCE/DOCKET NUMBER: 53 TELECOMMUNICATION INFORMATION: TELEPHONE: (202)672-5300 TELEPAX: (202)672-5399 APPLICANT: BENDÍG, Mary APPLICANT: JONES, Steven APPLICANT: SALDANHA, JOSE TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR NUMBER OF SEQUENCES: 158 APPLICANT: APPLICANT: APPLICANT: STREET: 3000 K St CITY: Washington COUNTRY: USA ZIP: 20007-5109 D.C 135 amino acids TSUCHIYA, Masayuki .NFOkpu... Harold C. 750: 25,258 53466/126/AAOK

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US-08-436-717-102
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                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC CENTRALINE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/436,717
FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/137,117
FILING DATE: 20-DEC-1993
APPLICATION NUMBER: WO PCT/JP92/00544
FILING DATE: 24-APR-1992
PRIOR APPLICATION NUMBER: UJ 4-32084
FRIOR APPLICATION NUMBER: UJ 4-32084
PRIOR DATE: 19-FEB-1992
PRIOR DATE: 19-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10 Patent No.
                                                                                      NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 77.5%; Score 497.5; Best Local Similarity 79.0%; Pred. No. 2.1 Matches 94; Conservative 11; Mismatches
                                                                                                         REFERENCE/DOCKET NUMBER: 25,258
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPAX: (202)672-5399
TELEX: 904116
                                                                                                                                                                                                                               APPLICATION NUMBER: JP 4-32084
FILING DATE: 19-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 3-95476
FILING DATE: 25-APR-1991
ATTORNEY/AGENT INFORMATION:
                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR
                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                NAME: WEGNER, Harold C. REGISTRATION NUMBER: 25
                                                     ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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TYPE:
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5817790
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                                                  135 amino acids
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3000 K Street, N.W., Suite 500
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protein
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US-08-561-521-41
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Best Local Similarity
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APPLICATION NUMBER: US/08/186,269A
FILING DATE: 25-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William L.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15270-14
                                                                                                                                                                                                                                                                                                        TELEFAX: 415-543-5043
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
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Best Local (
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                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-543-9600
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/561,521
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
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APPLICANT: Saldanha, Jose
APPLICANT: Jones, S. Tarran
                                                                                                                                                                                                                                 STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                  61 SQKFKGKATLIVDKSTSTAYMBLSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
                                                                               93;
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NOKFKGKVTMTVDTSTNTÄYMELSSLRSEDTÄVYYCARGGN---RFAYWGQGTLVTVSS 116
                                                            QVÓLVOSGAEVKKÉGASVKVSCKASGYSFTSYYIHWVROAÞGOGLEWVGYÍÐÞENGGTSY 60
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94; Conservative
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5840299
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                                                                                                                                     Conservative
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One Market Plaza, Steuart Tower, Suite 2000
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Teger, Olivier J.
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                                                                                                                                                  77.3%; Score 496.5; 78.2%; Pred. No. 2.7
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                                                                                                                                                                                                                                                                                                             41:
                                                                                                                                 12; Mismatches
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PCT-US95-01219-41
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                                                                                                                                                                                               Sequence 100, Application US/08137117D Patent No. 5795965
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
              GENERAL INFORMATION:
APPLICANT: TSUCHIYA, MASAYUKI
APPLICANT: SATO, Koh
APPLICANT: BENDIG, MATY
APPLICANT: BENDIG, MATY
APPLICANT: JONES, Steven
APPLICANT: SALDANHA, JOSE
TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN
TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR
NUMBER OF SEQUENCES: 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/186
PILING DATE: 25-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William L.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 1527
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 415-543-5043
INFORMATION FOR SEQ ID NO: 41:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Bendig, Mary M.
APPLICANT: Leger, Olivier J.
APPLICANT: Saldanha, Jose
APPLICANT: Jones, S. Tarran
TITLE OF INVENTION: Humanized Antibodies Against Leukocyte
TITLE OF INVENTION: Adhesion Molecule VLA-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/012
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MEDIUM TYPE: Floppy
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ADDRESSEE: Townsend and Townsend Khourie and Crew STREET: One Market Plaza, Steuart Tower, Suite 2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                         61 NQKFKGKVTMTVDTSTNTAYMELSSLRSEDTÄVYYCARGGN---RFAYWGQGTLVTVSS 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93;
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EVOLVOSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
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TELEX: 904136
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 135 amino acids
                                                                                                                                                                                                                                                                                                                      Sequence 100,
Patent No. 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/137,117D
FILING DATE: 20-DEC-1993
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/JP92/00544
FILING DATE: 24-APR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 4-32084
FILING DATE: 19-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 3-95476
FILING DATE: 25-APR-1991
ATTORNEY/AGENT INFORMATION:
ATTORNEY LAGENT INFORMATION:
                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                               APPLICANT: BENDIG, Mary
APPLICANT: JONES, Steven
APPLICANT: SALDANHA, Jose
TITLE OF INVENTION: RESHAPED HUMAN ANTIBODY TO HUMAN
TITLE OF INVENTION: INTERLEUKIN-6 RECEPTOR
NUMBER OF SEQUENCES: 158
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
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TELECOMMUNICATION INFORMATION:
                                                STREET: 3000 K 50
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
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REGISTRATION NUMBER: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEB: Poley & Lardner
STREET: 3000 K Street, N.W., Suite 500
CITY: Washington
STATE: D.C.
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                                                                                                   ADDRESSEE:
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      D.C.
USA
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5817790
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20007-5109
                                                                           E: Foley & Lardner
3000 K Street, N.W., Suite
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SATO, Koh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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(202) 672-5399
                                                                                                                                                                                                                                                                                Masayuki
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ARR: 53466/126/AAOK
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US-07-634-278-57
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APPLICANT: QUEEN, CAPPLICANT: CO, MAN
APPLICANT: SCHNEIDE
APPLICANT: LANDOLFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-436-717-100
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 904136
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                 STREET: 3/5 CITY: Palo Alto CITY: California
                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew
                                                                                                                                                                                       APPLICANT: SELICK, Harold E.
TITLE OF INVENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
NUMBER OF SEQUENCES: 113
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REFERENCE/DOCKET NUMBER: 53
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: JP 3-FILING DATE: 25-APR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 20-DEC-1993
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APPLICATION NUMBER: US/08/436,717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 77.3 nes 92; Conservative
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TOPOLOGY: linear
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FILING DATE: 19-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: WO PCT/JP92/00544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE: 24-APR-1992
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                                                                      94301
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CO, MAN SUNG
SCINEIDER, William P.
LANDOLFI, Nicholas F.
COELINGH, Kathleen L.
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                                                                                                                                    379 Lytton Avenue
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(202)672-5399
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
PC-DOS/MS-DOS
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Best Local S
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APPLICANT: QUEEN, Cary L.
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INFORMATION FOR
              COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/634,278
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APPLICATION NUMBER: US 07/
FILING DATE: 28-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and
                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                         APPLICANT: CO, Man Sung
APPLICANT: SCHNEIDER, William P.
APPLICANT: LANDOLFI, Nicholas F.
APPLICANT: COELINGH, Kathleen L.
APPLICANT: SELICK, Harold E.
APPLICANT: SELICK, Harold B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: peptide
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
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                                                                                                                                                                      STREET: 379 Lytton Avenue CITY: Palo Alto STATE: California
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APPLICATION NUMBER:
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APPLICATION NUMBER: US 07/590,274
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/634,278
FILING DATE: 19-DEC-1990
   FILING DATE:
                                                                                                                                           COUNTRY: US
ZIP: 94301
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94;
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94; Conservative
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19-DEC-1990
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                                                                                                                                                                                                                                                                      IMPROVED HUMANIZED IMMUNOGLOBLINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76.1%; ;
79.0%;
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Pred. No. 1.3e-39;
0; Mismatches 12
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                                               #1
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/590,274 FILING DATE: 28-SEP-1990

FILING DATE: APPLICATION NUMBER:

13-FEB-1989

US 07/310,252

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                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION UNMBER: US/08/477,728
APPLICATION UNMBER: US/08/477,728
FILING DATE: 07-UN-1995
CLASSIFICATION 1424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/634,278
FILING DATE: 19-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/590,274
APPLICATION NUMBER: US 07/590,274
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1WC CITY: Palo Alto CTATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAMB: Smith, William M
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
                                                                             FILING DATE: 28-SEP-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SELICK, Harold E.
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mes 94; Conservative
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TOPOLOGY: linear
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APPLICATION NUMBER: US 0 PILING DATE: 13-FEB-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QUEEN, Cary L.
                                                                                                                        28-SEP-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                113
                                           US 07/310,252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 07/290,975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version #1.25
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RESULT 10
US-08-477-728-73
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                 PRIOR AFFLICATION INUMBER: US 07/590,2/1
APPLICATION INUMBER: US 07/590,2/1
FILING DATE: 28-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/310,252
FILING DATE: 13-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/290,975
FILING DATE: 28-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
NAME: Smith, William M
NAME: Smith, William M
NAME: Smith, William M
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Best Local Similarity
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TELEPAX: (415) 326-2422
INFORMATION FOR SEQ ID NO: 57
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/634,278
FILING DATE: 19-DEC-1990
PRIOR APPLICATION DATA:
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NAME: Smith, William M
                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: SCHNBIDER, Willia APPLICANT: SELICK, Harold E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995 CLASSIFICATION: 424
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REGISTRATION NUMBER: 30
REFERENCE/DOCKET NUMBER:
NAME: Smith, William M
REGISTRATION NUMBER: 30
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NQKFKSKATITADESTNTAYMELSSLRSEDTAVYYCAR--GRP-AMDYWGQGTLVTVSS 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94;
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California
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                                                                                                                                                                                                                                                                                                                                              US/08/477,728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 07/290,975
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 11823-002600
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RESULT 11
US-08-474-040-57
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-477-728-73
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
TELEFAX: (415) 326-2422
INFORMATION FOR SEQ ID NO:
                                                      FILING DATE: 28-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 1182
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM.
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/474,040
                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/310,252
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                                                                                                                                                                                                                                                                                                                                           FILING DATE: 13-FEB-1989
PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
FILING DATE: 19-DEC-
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                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/590,274 FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Palo Alto
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57, 55,
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SCHNEIDER, William P.
LANDOLFI, Nicholas F.
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VENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QUEEN, Cary L.
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                                                                                                                                                                                                                                                                                                          US 07/290,975
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                                                                                                                                      11823-002600
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LENGTH: 116 aming
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Best Local !
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APPLICANT: QUEEN, Cary L.
                                                                                                                                   PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/290,975

FILING DATE: 28-DEC-1988

ATTORNEY/ACENT INFORMATION:

NAME: Smith, William M

REGISTRATION NUMBER: 30,223

REGISTRATION NUMBER: 30,223
                                                                                    REFERENCE/DOCKET NUMBER: 11823-002600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/310,252
FILING DATE: 13-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/474,040
FILING DATE: 07-UN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                          CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/634,278
FILING DATE: 19-DEC-1990
APPLICATION NUMBER: US 07/590,274
FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SELICK, HAROLG E.
TITLE OF INVENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
NUMBER OF SEQUENCES: 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 116 amure
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Similarity 79.0%;
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LANDOLFI, Nicholas F.
COELINGH, Kathleen L.
SELICK, Harold E.
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linear
                                                            73:
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Pred. No. 1.3e-39;
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US-08-487-200-57
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APPLICANT: QUEEN, Cary L.

APPLICANT: CO, Man Sung

APPLICANT: SCHNEIDER, William P.

APPLICANT: LANDOLFI, Nicholas F.

APPLICANT: COELINGH, Kathleen L.

APPLICANT: SELICK, Harold E.
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MOLECULE TYPE: -08-487-200-57
                                                                                                                                                                                                                                          PILING DATE: 13-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/290
FILING DATE: 28-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOPTWARE: PATENTIA Release CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08 FILING DATE: 7-UN-195 CLASSIFICATION: 424
                                                                                                                                            TELEFAX: (415) 326-2422 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: SELICK, HAROLG E.
TITLE OF INVENTION: IMPROVED HUMANIZED IMMUNOGLOBLINS
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 19-DEC-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/310,252
                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 379 Lytton Avenue CITY: Palo Alto STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/590,274 FILING DATE: 28-SEP-1990
                                       TOPOLOGY:
                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                    ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NQKFKSKATITADESTNTAYMELSSLRSEDTAVYYCAR--GRP-AMDYWGQGTLVTVSS 116
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                                                                              amino acid
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                                                                                                116 amino acids
                                                      single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 07/634,278
                                                                                                                                                                                                                                                                                                                                    US 07/290,975
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TOPOLOGY: 11;
MOLECULE TYPE:
US-08-487-200-73
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US-08-487-200-73
                                                                                                                                                                                                                            PILING DATE: 19-DEC-1990

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/590,274

PILING DATE: 28-SEP-1990

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/310,252

PILING DATE: 13-FEB-1989

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/290,975

PILING DATE: 28-DEC-1988

ATTORNEY/AGENT INFORMATION:
NAME: SMILT NUMBER: 10,233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: QUEEN, (
APPLICANT: CO, Man
APPLICANT: SCHNEIDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 73,
Patent No. 5
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                             TELEFAX: (415) 326-2422 INFORMATION FOR SEQ ID NO: '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: LANDOLFI, Nicholas F.
APPLICANT: COELINGH, Kathleen L.
APPLICANT: SELICK, Harold E.
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,200
PILING DATE: 7-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/634,278
                                                                                                                                                                REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                            SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 116 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                               REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PatentIn Release #1.0, Version #1.25
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SCHNBIDER, W
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                                    linear
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             peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Floppy disk
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                                                                                                                               73:
                                                                                                                                                                                                       11823-002610
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Query Match Best Local Similarity

76.1%; 79.0%;

Score 488.5; DB 1; Pred. No. 1.3e-39;

Length 116;

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                                                                                                                                       ; TOPOLOGY: linear;
; MOLECULE TYPE: peptide
US-08-484-537-57
                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/634,278
FILING DATE: 19-DEC-1990
APPLICATION NUMBER: US 07/590,274
FILING DATE: 28-SEP-1990
PRIOR APPLICATION NUMBER: US 07/310,252
FILING DATE: 13-FEB-1989
PRIOR APPLICATION NUMBER: US 07/290,975
FILING DATE: 28-DEC-1988
APPLICATION NUMBER: US 07/290,975
FILING DATE: 28-DEC-1988
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 11823-002600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 326-2422
INFORMATION FOR SEQ ID NO: 57:
INFORMATION FOR SEQ ID NO: 57:
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US-08-484-537-57
                                                           Query Match 76.1%; Score 488.5; DB 3; Best Local Similarity 79.0%; Pred. No. 1.3e-39; Matches 94; Conservative 10; Mismatches 12;
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,537
FILING DATE:
CINCELECTION
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APPLICANT: QUEEN,
APPLICANT: CO, Man
                                                                                                                                                                               TYPE: amino acids
STRANDEDNESS: #inc'
TOPOLOGY
                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: QUBEN, Cary L.
APPLICANT: CO, Man Sung
APPLICANT: SCHNEIDER, William P.
APPLICANT: LANDOLFI, Nicholas F.
APPLICANT: COSLINGH, Kathleen L.
APPLICANT: SELICK, Harold E.
APPLICANT: SELICK, Harold E.
APPLICANT: SELICK, HAROLD IMPROVED HUMANIZED IMMUNOGLOBLINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 379 Lytton Avenue CITY: Palo Alto
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o. 6180370
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Townsend and Townsend Khourie and Crew
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Indels
                                                             Indels
                                                                                                 Length 116;
                                                           3; Gaps
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Search completed: December 29, 2004, 18:09:13 Job time : 21.5354 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĕ
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   654821
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     December 29, 2004, 17:47:08; Search time 18.4646 Seconds (without alignments)
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1: /cgn2_6/ptodata/1/laa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/laa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/laa/6B_COMB.pep:*
4: /cgn2_6/ptodata/1/laa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/laa/backfiles1.pep:*
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          DIKMTQSPSSMYASLGERVT.....CLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-08-875-811-45
US-08-875-811-45
US-08-875-811-45
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-875-811-47
US-08-475-15716-4
US-08-477-788A-26
US-08-477-788A-26
US-08-477-788A-26
US-08-477-788A-26
US-08-477-718A-123
US-08-477-788A-26
US-08-478-1138-123
US-08-478-123
US-08-478-123
US-08-488-1138-123
US-08-610-389-123
US-09-711-4848-123
US-09-711-4848-123
US-09-711-485-123
US-09-711-485-123
US-09-711-485-123
US-08-479-715-38-123
US-08-479-715-38-123
US-08-737-129A-8
US-08-879-9408-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
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Sequence 41, Appl Sequence 49, Appl Sequence 45, Appl Sequence 47, Appl Sequence 47, Appl Sequence 47, Appl Sequence 47, Appl Sequence 4, Appl Sequence 26, Appl Sequence 26, Appl Sequence 26, Appl Sequence 123, Appl Sequence 21, Appl Se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
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| <u>4</u> 4<br>5   | 44                | 43                | 42                | 41                | 40                | 39                | 38                | 37                | 36                 | 35                 | 34                | ü                 | 32                | 31                | 30                | 29                | 28                |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 487               | 487               | 487               | 487               | 487               | 487               | 487               | 487               | 487               | 487                | 487                | 487               | 508               | 508               | 508               | 508               | 519.5             | 519.5             |
| 86.5              | 86.5              | 86.5              | 86.5              | 86.5              | 86.5              | 86.5              | 86.5              | 86.5              | 86.5               | 86.5               | 86.5              | 90.2              | 90.2              | 90.2              | 90.2              | 92.3              | 92.3              |
| 107               | 107               | 107               | 107               | 107               | 107               | 107               | 107               | 107               | 107                | 107                | 107               | 107               | 107               | 107               | 107               | 258               | 129               |
| 4.                | w                 | ω                 | w                 | N                 | N                 | N                 | <b>–</b>          | ۲                 | ۲                  | _                  | _                 | N                 | N                 | ب                 | _                 | N                 | 2                 |
| US-09-711-485-125 | US-09-610-838-125 | US-09-136-389-125 | US-08-839-765-125 | US-08-082-842A-87 | US-08-646-360-125 | US-08-477-531B-65 | US-08-472-788A-87 | US-08-107-669D-65 | US-08-477-484B-125 | US-08-488-113B-125 | US-08-425-336-125 | US-08-082-842A-27 | US-08-477-531B-27 | US-08-472-788A-27 | US-08-107-669D-27 | US-08-860-174A-13 | US-08-860-174A-5  |
| Sequence 125, App | Sequence 125, App | Sequence 125, App | Sequence 125, App | Sequence 87, Appl | _                 | Sequence 65, Appl |                   | Sequence 65, Appl |                    | Sequence 125, App  | ū                 |                   |                   | Sequence 27, Appl |                   | Sequence 13, Appl | Sequence 5, Appli |

## ALIGNMENTS

RESULT 1 US-08-875-811-41

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; MOLECULE TYPE: US-08-875-811-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 41, Application US/08875811
Patent No. 6045793
GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                              SOFTWARE: PATENTIN Release #1.0, Version CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/08/875,811
FILING DATE: 19-FEB-1998
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US97/02588
FILING DATE: 19-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,800
FILING DATE: 11-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Paris, Susan K.
REGISTRATION NUMBER: 41,739
REGISTRATION NUMBER: 41,739
                                                                                                                                                                                            TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Rybak, Susanna M.
APPLICANT: Newton, Dianne L.
APPLICANT: Boque, Lluis
APPLICANT: Wlodawer, Alexander
APPLICANT: Wlodawer, Alexander
TITLE OF INVENTION: Recombinant Ribonuclease Proteins
                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 355 amino acids
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and
STREET: Two Embarcadero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: Two Line.
CITY: San Francisco
                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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                                                                                                         linear
                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                                                                                                                                576-0300
97.9%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Townsend and Crew LLP Center, Eighth Floor
                                                                                                                                                                                                                                                                                   015280-244100US
Score 551; DB 3;
Pred. No. 8.4e-46;
                    Length 355
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Matches

104;

RESULT 2 US-08-875-811-49

tent No. 6043, TONERAL INFORMATION:

49,

APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:

JE OF INVENTION:

94111-3834

USA

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; MOLECULE TYPE: protein US-08-875-811-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: WO PCT/US97/0251
FILING DATE: 19-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,800
FILING DATE: 21-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Faris, Susan K.
REGISTRATION NUMBER: 41,739
REFERENCE/DOCKET NUMBER: 015280-2441
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0300
TELEFAX: (415) 576-0300
TRILEPAX: C415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 576-030 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 355 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                               RPSGSGSGODYSLTISSLEYEDMGIYYCLQYDEPPYTPGGGTKLEIK 107
                                                                                                                                       RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                  DIKMTOŚPSSMYASLOBROTFTCKASODINNYLCWFOOKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                              DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKDGKSPKTLIYRANRLVDGVPS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 DIKMTQSÞSSMÝASLGERVIFTCKASQDINNYLCWFQQKÞGKSÞKTLIYRANRLYDGVÞS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 DIKMTQSPSSMYASIGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Newton, Dlan...
Newton, Dlan..
                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rybak, Susanna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                  97.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO PCT/US97/02588
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49:
                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                         Score 551; DB 3;
Pred. No. 8.4e-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              015280-244100US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version #1.30
                                                                                                                                                                                                                                                                                                                                                                   Length 355;
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                                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                             Gaps
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                                                                              Sequence 45, Application Patent No. 6045793
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Rybak, Susanna
APPLICANT: Newcon, Dianne
APPLICANT: Newcon, Lluis
APPLICANT: Wlodawer, Alex
TITLE OF INVENTION: Recom
NUMBER OF SEQUENCES: 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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Patent No. 60
     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Faris, Subatt...

REGISTRATION NUMBER: 41,739
REFERENCE/DOCKET NUMBER: 0152.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
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APPLICATION NUMBER: WO PCT/US97/02588
FILING DATE: 19-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,800
FILING DATE: 21-FEB-1996
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
TO 1/10 10 TE 611
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ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 1..355
OTHER INFORMATION:
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                                                                                                                5, Application US/08875811
6045793
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6045793
Rybak, Susanna M.
Newton, Dianne L.
Boque, Lluis
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21-FEB-1996
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Dianne L.
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Pred. No. 8.4e-46;
1; Mismatches 2
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FILING DATE:

RESULT 3

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Query Match Best Local Similarity

TOPOLOGY:

Matches

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RESULT 5
US-08-875-811-51
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Best Local Similarity 97.2%;
Matches 104; Conservative
                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Rybak, Susanna M.
APPLICANT: Newton, Dianne L.
APPLICANT: Boque, Lluis
APPLICANT: Wlodawer, Alexander
TITLE OF INVENTION: Recombinant Ribonuclease Proteins
NUMBER OF SEQUENCES: 64
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US97/02588
FILING DATE: 19-FEB-1997
PRIOR APPLICATION NUMBER: US 60/011,800
APPLICATION NUMBER: US 60/011,800
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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REFERENCE/DOCKET NUMBER: 01:
TELECOMMUNICATION INFORMATION:
                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
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ATTORNEY/AGENT INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA;
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION: Recombinant Ribonuclease Proteins
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                                                                                 CITY: San Francisco
STATE: California
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TOPOLOGY: linear
                                                                COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Faris, Susan K.
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Two Embarcadero Center, Eighth Floor
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Patent No. 6
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Best Local Similarity
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/875,811
FILING DATE: 19-FEB-1998
CLASSIFICATION: 435
CRISCON APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US97/02588
FILING DATE: 19-FEB-1997
PRIOR APPLICATION DATA:
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Rybak, Susanna M.
APPLICANT: Newton, Dianne L.
APPLICANT: Boque, Lluis
APPLICANT: Wlodawer, Alexander
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LENGTH: 358 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 576-0200
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NAME: Faris, Susan K.
REGISTRATION NUMBER: 41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 19-FEB-
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE: 21-FEB-
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PRIOR APPLICATION DATA:
WO PCT/US97/02588
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STREET: AND F
                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                              PatentIn Release #1.0, Version #1.30
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97.2%;
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Pred. No. 8.5e-46;
1; Mismatches 2
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US 60/011,800

ATTORNEY/AGENT INFORMATION:

FILING DATE:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; MOLECULE TYPE: protein US-08-875-811-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 43,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 104;
                                                        TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/US97/02588
FILING DATE: 19-FEB-1997
PRIOR APPLICATION NUMBER: US 60/011,800
APPLICATION NUMBER: US 60/011,800
                                                                                       NAME: Faris, Susan K.
REGISTRATION NUMBER: 41,739
REFERENCE/DOCKET NUMBER: 01:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PATENTIAN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/875,811
FILING DATE: 19-FEB-1998
                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: RENUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acids
TOPOLOGY: 1:--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Rybak, Susanna M. APPLICANT: Newton, Dianne L. APPLICANT: Boque, Lluis APPLICANT: Wlodawer, Alexand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3, Application US/08875811
6045793
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDBFFYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DIKMTQSPSSMYASIGERVTFTCKASQDINNYLCWFQQKPGKSPKTLIYRANRLVDGVPS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         California
379 amino acids
nino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wlodawer, Alexander
VENTION: Recombinant Ribonuclease Proteins
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                                                                                                                                                                                                        21-FEB-1996
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97.2%;
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                                                                                                                            015280-244100US
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US-08-348-548-4
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                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                         Matches 102;
                                                                                                                                                                                                                                                     TRIEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
TRNGTH: 127 amino acids
                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Vei
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/348,548
FILING DATE: 01-DEC-1994
ATTORNEY/ACENT INFORMATION:
NAME: Clark, Paul T
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 06132/0090(
TELLEPHONE: (617) 542-5070

TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/08348548
Patent No. 6258529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 104;
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APPLICANT:
                                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Berdoz, Jose
APPLICANT: Kraehenbuhl, Jean Pierre
TITLE OF INVENTION: PCR AMPLIFICATION OF REARRANGED GEN
TITLE OF INVENTION: VARIABLE REGIONS OF IMMUNOGLOBULIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                      TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: not
                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                  61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      143 DIKWTQSPSSMYASIGERVTFTCKASQDINNYLCWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 249
                                                                      1 DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DIKMTQSPSSMYASIGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS 60
                                                     DIKVTQSPSSMYASLGERVTITCKASQDINNYLNWFQQKPGKSPKTLIYRANRLLDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Boston
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225 Franklin Street,
                                                                                                                        Conservative
                                                                                                                                                                                                                      linear
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                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                     not relevant
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                                                                                                                                     97.0%;
95.3%;
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97.2%;
                                                                                                                        5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                     06132/009001
                                                                                                                                     Score 546; DB 3;
Pred. No. 8.2e-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 551; DB 3
Pred. No. 9e-46;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suite 3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version #1.30B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 3;
                                                                                                                                                   Length 127;
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                                                                                                                      Indels
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RESULT 9

PCT-US95-15716-4

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RESULT 10
US-08-107-669D-26
; Sequence 26, Application US/08107669D
""" arent No. 5766886
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Best Local Similarity
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GENERAL INFORMATION:
                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 127 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30B
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 06132/009001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION UNBER: US 08/348,548
FILING DATE: 01-DEC-1994
ATTORNEY/AGENT INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
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APPLICANT: Kraehenbuhl, Jean Pierre
TITLE OF INVENTION: PCR AMPLIFICATION OF REARRANGED GENOMIC
TITLE OF INVENTION: VARIABLE REGIONS OF IMMUNOGLOBULIN GENES
                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 200154
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STREET: 22
TTY: Boston
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                       COUNTRY:
                                                                                      CITY: Washington
                                                                                                            STREET:
                                                                                                                         ADDRESSEE:
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                                      20005-3934
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                                                                                                                                                                                                                                                                                                                                           RFSGSGSGQDYSLTISSLEYEDMGIYYCLQFDEFPYTFGGGTKLEIK 127
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                                                                         D.C.
                                                                                                         E: Sterne, Kessler,
1100 New York Ave.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225 Franklin Street, Suite 3100
                                                       United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           not relevant
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 546; DB 5; Length 127; Pred. No. 8.2e-46;
                                                                                                         Goldstein and Fox P.L.L.C. N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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US-08-472-788A-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 26, Application US/08472788A Patent No. 5770196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 202/371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US
PILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
PILING DATE: 13-DEC-1991
ATTORNEY_AGENT INFORMATION:
NAME: Michele A. Cimbala
                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: #Toppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Studnicka, Gary M.
APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
NUMBER OF SEQUENCES: 89
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein and Fox P.L.L.C.
STREET: 1100 New York Ave., N.W., Suite 600
                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,788A
FILING DATE: 07-JUN-1995
FILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
                                               APPLICATION NUMBER: 08/01
FILING DATE: 23-JUN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compained operating SYSTEM: PC-DC SOFTWARE: Patentin Reluction DATA:
                                                                                                                        CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                          STREET: 11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Michele A. Cimbala REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 13-AUC
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96.3%;
                                                                                                         08/082,842
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US 07/808,464
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Pred. No. 2.1e-45;
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ATTORNEY/AGENT INFORMATION:

FILING DATE:

13-DEC-1991

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                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/107,669
FILING DATE: 13-AUG-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: Michele A. Cimbala
REGISTRATION NUMBER: 33,851
REFERENCE/DOCKET NUMBER: 0610.100004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 26, Application US/08477531B
Patent No. 5821123
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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Best Local (
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SEQUENCE CHARACTERISTICS:
LENGTH: 107 amino acids
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                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, vc
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,531B
FILLING DATE: 07-JUN-1995
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COMPUTER READABLE FORM:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
TELEPHONE: 202/371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 436
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1100 New York Ave.,
                                     202/371-2540
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VENTION: Modified Antibody Variable Domains (as amended)
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                                                                        33,851
ER: 0610.1000004/MAC
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                                                                                                                                                                                                                                                                                                                                                                                        Version #1.25
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; TOPOLOGY: line
; MOLECULE TYPE: I
US-08-477-531B-26
                                                                                                                                                                           ; MOLECULE TYPE: protein US-08-082-842A-26
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Best Local Similarity
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/082,842A
FILING DATE: 23-UN-1993
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: Cimbala, Michele A.
REGISTRATION NUMBER: 03,851
REFERENCE/DOCKET NUMBER: 0610.1000002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202/371-2600
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                                                                                                                                                                                                                                           LENGTH:
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                                                                                                          103;
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47. 586961
61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
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Y: linear
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                                                                                                        96.1%; Score 541; DB 2; ilarity 96.3%; Pred. No. 2.1e-45; Conservative 2; Mismatches 2
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Modified Antibody Variable Domains
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96.3%;
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Pred. No. 2.1e-45;
                                                                                                                                    Length 107;
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RPSGSGSGQDYSLTISSLDYEDMGIYYCQQYDESPWTFGGGTKLEIK 107

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RESULT 15
US-08-488-113B-123
; Sequence 123, Application US/08488113B
; Patent No. 5744580
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Best Local Similarity
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/064,691
FILING DATE: 12-MAY-1993
APPLICATION NUMBER: US 07/901,707
FILING DATE: 19-JUN-1992
PRIOR APPLICATION DATA:
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APPLICANT: Better, Marc D.
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/425,336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Meyers, Thomas C.
REGISTRATION NUMBER: P-36,989
REFERENCE/DOCKET NUMBER: 31394
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: Chicago
CITY: Chicago
Illinois
TISA
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LENGTH: 107 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Carroll, Stephen F.
APPLICANT: Studnika, Gary M.
TITLE OF INVENTION: Immunotoxii
TITLE OF INVENTION: Proteins
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STRANDEDNESS:
TOPOLOGY: lin
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                                                                                                                                           61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
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                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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6300 Sears Tower, 233 South Wacker Drive
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,113B
FILING DATE: 07-UN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
US 08/425,336
FILING DATE: 18-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/064,691
FILING DATE: 12-MAX-1993
PRIOR APPLICATION NUMBER: US 08/064,691
FILING DATE: 12-MAX-1993
PRIOR APPLICATION NUMBER: US 07/988,430
PRIOR APPLICATION NUMBER: US 07/988,430
                                                                                                                                                            Matches
                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 07/988,430
APPLICATION NUMBER: US 07/988,430
FILING DATE: 09-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/901,707
FILING DATE: 19-JUN-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/787,567
                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 312/707-8889
TELEPAX: 312/707-9155
TELEX: 650 388-1248
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Better
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FILING DATE: 04-NOV-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: Chicago
CITY: Chicago
Illinois
TISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11022US07/200-70.P3.C2A
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: McNicholas, Janet M. REGISTRATION NUMBER: 32,91
                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
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                                         61 RESGSGSGODYSLTISSLEYEDMGIYYCLQYDBFPYTFGGGTKLBIK 107
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Similarity 94.4%;
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                                                                                                                                                            Conservative
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                                                                                                                                                            4; Indels
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Search completed: December 29, Job time: 19.4646 secs

2004, 18:08:59

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Run

Copyright

Title: Perfect score:

US-10-774-076-4 617

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Sequence Sequence Sequence Sequence

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      December 29, 2004, 17:47:08; Search time 20.0177 Seconds (without alignments) 384.304 Million cell updates/sec
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2: /cgn2_6/ptodata/1/laa/5B_COMB.pep:*

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5: /cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/laa/backfiles1.pep:*
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US-08-767-128-22
US-08-93-035A-38
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US-08-471-426-6
PCT-US94-01709-6
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US-09-186-082-16
US-09-18-082-16
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Sequence 6, Appli
Sequence 6, Appli
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Sequence 11, Appli
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Sequence 26, Appli
Sequence 44, Appli
Sequence 44, Appli
Sequence 47, Appli
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Sequence 16, Appli
Sequence 17, Appli
Sequence 18, Appli
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Sequence 10, Appli
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US-08-767-128-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22, Application US/08767128
Patent No. 6111079
GENERAL INFORMATION:
APPLICANT: WYLIE, DWANE E.
APPLICANT: LOPEZ, OSVALDO
APPLICANT: LOPEZ, OSVALDO
APPLICANT: GOEBEL, PETER JOSEPH
APPLICANT: GOEBEL, PETER
TITLE OF INVENTION: LEAD BINDING POLYPEPTIDES AND TITLE OF INVENTION: NUCLEOTIDES CODING THEREFORE
                                                                                                                                                                      APPLICATION NUMBER: 09/40258

PILING DATE: 04-DEC-1996

CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/09258

PILING DATE: 05-JUN-1996

PRIOR APPLICATION NUMBER: 08/541,373

PILING DATE: 10-OCT-1995

PRIOR APPLICATION NUMBER: 08/462,798

PILING DATE: 105-JUN-1995

APPLICATION NUMBER: 08/462,798

PILING DATE: 05-JUN-1995

APPLICATION NUMBER: 08/462,798

PILING DATE: 05-JUN-1995

APPLICATION NUMBER: 08/462,798

PILING DATE: 05-JUN-1995

APPLICATION NUMBER: 35,093

REGISTRATION NUMBER: 35,093
   TELEX:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
OPERATING SYSTEM: DO
                                                                                         REFERENCE/DOCKET NUMBER: 86
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612/371-5278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
STREET: 3100 No. 6111079west Center, 90 South Seventh St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 3100 No. 61
CITY: Minneapolis
STATE: MN
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                   TELEFAX: 612/332-9081
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         22:
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US-09-649-063-21
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PCT-US96-09448-11
US-09-171-945-11
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US-09-647-468-155
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US-08-66-265A-29
US-08-561-521-9
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US-08-561-521-9
US-08-561-521-9
US-08-647-468-155
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US-09-434-122-31
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Result No.

Score

Query Match Length

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Database

654921

Minimum DB Maximum DB

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length: 0 length: 2000000000

Searched:

478139 seqs,

Scoring table: Sequence:

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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-983-035A-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-08-983-035A-38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 38, Application US/08983035A Patent No. 6326464 GENERAL INFORMATION:
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                                                                                                                                                                                                 TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 20005-3315

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/983,035A
FILING DATE: 20-Feb-1998
CIASSIFICATION UMBER: WT/FR96/01111
PRIOR APPLICATION NUMBER: PCT/FR96/01111
FILING DATE: 17-UU-1996
APPLICATION NUMBER: PT/FR96/01111
FILING DATE: 19-JUL-1995
APPLICATION NUMBER: PT/FR96/01111
FILING DATE: 19-JUL-1995
APPLICATION NUMBER: PT/FR96/01111
FILING DATE: 19-JUL-1995
ATTORNEY/AGENT INFORMATION:
NNMF. STATES AND STATES A
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FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                  NAME: Strauss, William L.
REGISTRATION NUMBER: 47,114
REFERENCE/DOCKET NUMBER: 03804.0142
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: P53 PROTEIN VARIANTS AND THERAPEUTICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: CONSEILLER, EMMANUEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tch 84.8%; al Similarity 86.4%; 102; Conservative
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                                                                                                                                                                LENGTH: 535 amino acids
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STREET: 1300 I Street, NW
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                             38:
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-017-570-6
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                                                                                                                                                                                                                                                                                                                                                                                           Matches 101;
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Best Local
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NAME: ULMER DUANE C
REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: C-38
TELECOMMUNICATION INFORMATION:
TELEPHONE: (517) 636-8104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 100; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acid
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM C Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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APPLICANT:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
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FILING DATE: 19930216
CLASSIFICATION: 424
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                                                              113
121 TVSS 124
                                                                                                                                   61
                                                                                                                                                       61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTIT----FAYWGQGTLV 112
                                                                                                                                                                                                                                                                                       1 EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDDENGDTEY 60
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                                                          TVSA 116
                                                                                                                 APKFQGKATMTTDTSSNTAYLQLSSLTSEDTAVYYCNTRGLSTMITTRWFFDVWGAGTTV
                                                                                                                                                                                                                                              EVOLOQSGAELVRSGASVKMSCTASGFNIKDYYMHWVKORPEQGLEWIGWIDPENGDTEY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 124 amino acids
AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P.O.
                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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VENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
VENTION: ANTIGEN CHIMERIC ANTIBODIES
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RIXON, MARK W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEZES, PETER S
KAPLAN, DONALD A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Box 1967
                                                                                                                                                                                                                                                                                                                                                                                                                       82.3%;
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84.7%;
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                                                                                                                                                                                                                                                                                                                                                                                 Score 508; DB 1
Pred. No. 1e-44;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Mismatches
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Pred. No. 9.1e-45;
                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 124;
                                                                                                                                                                                                                                                                                                                                                                                 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 535
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                                                                                                                          RESULT 5
PCT-US94-01709-6
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Patent No. 580
GENERAL INFOR!
APPLICANT:
APPLICANT:
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                                                                                           Sequence 6, Application PC/TUS9401709 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 101; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acid
         APPLICANT: THE DOW CHEMICAL COMPANY
APPLICANT: U.S.A. DEPT. OF HEALTH AND HUMAN SERVICES
TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
TITLE OF INVENTION: ANTIGEN CHIMERIC ANTIBODIES
NUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: C-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 08/0
FILING DATE: 16-FEB-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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ORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/OFILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
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                                                                                                                                                                                                                       TVSA 116
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                                                                                                                                                                                                                                                                                   APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTIT----
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P.O. Box 1967
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Pred. No. 1e-44;
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                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR FILING DATE: 1997-03-10
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR FILING DATE: 1998-01-12
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR FILING DATE: 1998-02-13
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Best Local Similarity
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ZIP: 48641-1967
ZIP: 48641-1967
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC COMPATIBLE
COMPATIBLE
CONTROL
CONTROL
COUNTRY: US
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NAME: ULMER, DUANE C
REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: 38,7
TELECOMMUNICATION INFORMATION:
TELEPHONE: (517) 636-8104
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PSCA: PROSTATE STEM CEI
FILE REFERENCE: 30435.54USI4
CURRENT APPLICATION NUMBER: US/09/564,329A
CURRENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/359,326
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APPLICANT: Witte,
APPLICANT: Saffrar
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LENGTH: 124 amino acid
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/01709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
STREET: P.
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CLASSIFICATION:
                                                                                                     APPLICATION NUMBER: 60/113,230
FILING DATE: 1998-12-21
APPLICATION NUMBER: 60/120,536
FILING DATE: 1999-02-17
                                                            APPLICATION NUMBER: 60/124,658
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5. 6541212
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ilarity 81.5%;
Conservative
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09/038,261
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Pred. No. 1e-44;
4; Mismatches
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APPLICANT: Witte, Owen N.

APPLICANT: Witte, Owen N.

APPLICANT: Saffran, Douglas C.

ITITE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF

FILE REFERENCE: 30435.54USI4

CURRENT APPLICATION NUMBER: US/09/963,620

CURRENT FILING DATE: 2001-09-26

PRIOR APPLICATION NUMBER: 09/564,329

PRIOR FILING DATE: 2000-05-03

PRIOR APPLICATION NUMBER: 09/359,326

PRIOR APPLICATION NUMBER: 09/359,326

PRIOR APPLICATION NUMBER: 08/814,279

PRIOR APPLICATION NUMBER: 08/814,279

PRIOR APPLICATION NUMBER: 60/071,141

PRIOR APPLICATION NUMBER: 60/071,141

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/113,230

PRIOR APPLICATION NUMBER: 60/113,230

PRIOR APPLICATION NUMBER: 60/120,536

PRIOR APPLICATION NUMBER: 60/120,536
                                       TYPE: PRT
/ ORGANISM: SCID Mice
US-09-963-620-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 136
; TYPE: PRT
; ORGANISM: SCID Mice
US-09-564-329A-11
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Query Match
                                                                                                                                                          SEQ ID NO 11
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PRIOR APPLICATION NUMBER: 09/203,939
PRIOR FILING DATE: 1998-12-02
PRIOR APPLICATION NUMBER: 09/251,835
PRIOR FILING DATE: 1999-02-17
PRIOR APPLICATION NUMBER: 09/308,503
PRIOR FILING DATE: 1999-05-25
NUMBER OF SEQ ID NOS: 27
                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 09/203,939
PRIOR FILING DATE: 1998-12-02
PRIOR APPLICATION NUMBER: 09/251,835
PRIOR FILING DATE: 1999-02-17
PRIOR APPLICATION NUMBER: 09/308,503
PRIOR FILING DATE: 1999-05-25
                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn Ve
                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-03-16
PRIOR APPLICATION NUMBER: 09/038,261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. 6/JULINOS PATENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence 11,
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                              LENGTH: 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74 VPKPQGKATWTADIFSNTAYLHLSSLTSEDTAVYYCKTG----GFWGQGTLVTVSA 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09963620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                              Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.2%; Score 507; DB 4; Length 136; 84.5%; Pred. No. 1.5e-44; ative 4; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4;
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82.2%;

Score 507;

BB 4.

Length 136;

US-09-423-439-44

Sequence 44, Application US/09423439 Patent No. 6339070

RESULT

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APPLICANT: Witte, Owen N.

APPLICANT: Witte, Owen N.

APPLICANT: Saffran, Douglas C.

ITILE OF INVENTION: PSCA: PSCASTATE STEM CELL ANTIGEN AND USES THEREOF FILE REFERENCE: 30435.54US4

CURRENT APPLICATION NUMBER: US/09/855,632

CURRENT FILING DATE: 2001-05-14

PRIOR APPLICATION NUMBER: 09/564,329

PRIOR PRIOR APPLICATION NUMBER: 09/359,326

PRIOR PRIOR APPLICATION NUMBER: 09/359,326

PRIOR FILING DATE: 1999-07-20

PRIOR FILING DATE: 1999-07-20

PRIOR FILING DATE: 1999-07-10

PRIOR PRICATION NUMBER: 60/071,141

PRIOR PRICATION NUMBER: 60/071,141

PRIOR PRICATION NUMBER: 60/071,675

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/113,230

PRIOR APPLICATION NUMBER: 60/120,536

PRIOR FILING DATE: 1998-02-17

PRIOR APPLICATION NUMBER: 60/124,658

PRIOR PILING DATE: 1999-03-16

PRIOR APPLICATION NUMBER: 09/038,261

PRIOR APPLICATION NUMBER: 09/038,261

PRIOR FILING DATE: 1998-03-10

PRIOR APPLICATION NUMBER: 09/203,939

PRIOR FILING DATE: 1998-03-10

PRIOR PILING DATE: 1998-03-10

PRIOR APPLICATION NUMBER: 09/251,835
                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/251,835
PRIOR FILING DATE: 1999-02-17
PRIOR PELLING DATE: 1999-05-25
PRIOR FILING DATE: 1999-05-25
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 11
LENGTH: 136
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US-09-855-632-11
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                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: SCID Mice
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Matches 98; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Reiter, Robert E. APPLICANT: Witte, Owen N.
                                                                                                                                                                                                                 Local
74 VPKFQGKATWTADIFSNTAYLHLSSLTSEDTAVYYCKTG----GFWGQGTLVTVSA 125
                              61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA 116
                                                                                                                  1 EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDDENGDTEY 60
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o. 6790939
                                                                                                                                                                                                                 Similarity
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                                                                                        EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVNQRPDQGLEWIGWIDPENGDTEF
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                                                                                                                                                                                         Conservative
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                                                                                                                                                                                     Score 507; DB 4; Length 136;
Pred. No. 1.5e-44;
4; Mismatches 10; Indels
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4; Mismatches 10;
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US-09-423-439-26
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                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 26, Application US/09423439
Patent No. 6339070
GENERAL INFORMATION:
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APPLICATION NUMBER: PCT/GB98/01294
FILING DATE: 05-WAY-1998
APPLICATION NUMBER: GB 9709421.3
FILING DATE: 10-WAY-1997
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MS WORD
CURRENT APPLICATION NUMBER: US/09/423,439
FILING DATE: 09-No. 6339070-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 80.8 nes 97; Conservative
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MS Word
                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Pillsbury Winthrop, L
STREET: 1100 New York Ave., N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 44:
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APPLICATION NUMBER: US/09/423,439
FILING DATE: 09-No. 6339070-1999
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: CHEMICAL COMPOUNDS
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSE: Pillsbury Winthrop, L.L.P.
STREET: 1100 New York Ave., N.W.
                                                                                                                                                                                                                                                                                                                         BLAKEY, David Charles
TITLE OF INVENTION: CHEMICAL COMPOUNDS
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: EMERY, Stephen Charles
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BLAKEY, David Charles
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TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                          COUNTRY: U.S.A.
                                                                                                                                                                                                                       STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APKFRGKATLTADSSSNTAYLHLSSLTSEDTAVYYCHVLIYAGYLAMDYWGQGTSVAVSS 142
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US-09-423-439-51
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                                                                          US-09-423-439-51
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Patent No. 6339070
GENERAL INFORMATION:
                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Matches
                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION UNDBER: PCT/GB98/01294
FILING DATE: 05-MAY-1998
APPLICATION NUMBER: GB 9709421.3
FILING DATE: 10-MAY-1997
INFORMATION FOR SEQ ID NO: 51:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 10-MAY-: INFORMATION FOR SEQ ID NO: 26:
Local Similarity
nes 97; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                      TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: S
                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MS WORD
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/423,439
PILING DATE: 09-No. 6339070-1999
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: EMERY, Stephen Charles
BLAKEY, David Charles
TITLE OF INVENTION: CHEMICAL COMPOUNDS
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION UNMBER: PCT/GB98/01294
FILING DATE: 05-MAY-1998
APPLICATION NUMBER: GB 9709421.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                LENGTH: 666 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVQLQQSGAELVRSGASVKLSCTASGFNIKDNYMHWVKQRPEQGLEWIAWIDPENGDTBY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Pillsbury Winthrop, I STREET: 1100 New York Ave., N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 642 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09423439
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81.8%; Score 505; DB 3; Length 666;
80.8%; Pred. No. 1.6e-43;
tive 7; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81.8%;
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                                                                                          SEQ ID NO: 51:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 505; DB 3;
Pred. No. 1.5e-43;
7; Mismatches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26:
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Conservative

4

Gaps

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RESULT 13
US-08-471-426-4
; Sequence 4, Application US/08471426
; Patent No. 5808033
                                                                                                                                                                                                                                                                                                                                                                                  / TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-017-570-4
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US-08-017-570-4
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Best Local &
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APPLICANT: GOURLIE
APPLICANT: RIXON,
APPLICANT: MEZES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY AGENT INFORMATION:
NAME: ULMER, DUANE C
REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: C-38
TELECOMMUNICATION INFORMATION:
TELEPHONE: (517) 636-8104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (517) 636-
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Duane C. Ulmer
STREET: P.O. Box 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: KAPLAN, DONALD A
APPLICANT: SCHLOM, JEFFREY
TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
TITLE OF INVENTION: ANTIGEN CHIMERIC ANTIBODIES
ONUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/017,570 FILING DATE: 19930216 CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                          113
                                                                                                         121 AVSS 124
                                                                                                                                                               61 APKFQGKATMITDISSNIAYLQLSSLISEDIAVYYCNIRGLSIMITIRWFFDVWGAGITV
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                                                                                                                                                                                                                               EVOLOOSGAELVRSGASVKMSCTASGFNIKDYYMHWVKORPEQGLEWIGWIDPENGDTEY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APNFQGRATWIADISSNTAYLQLSSLISEDIAVYYC----YGGTITFAYWGQGTLVTVSA 116
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RIXON, MARK W
MEZES, PETER S
                                                                                                                                                                                                                                                                                                                           81.5%;
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Pred. No. 3.4e-44;
4; Mismatches 12; Indels
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RESULT 14
PCT-US94-01709-4
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/017,570
FILING DATE: 16-FEB-1993
ATTORNEY/AGENT INFORMATION:
NAME: ULMER, DUANE C
REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: C-38,7
TELECOMMUNICATION: THORMATION:
TELECOMMUNICATION TO NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: GOURLIE, BRIAN B
APPLICANT: MIZES, PETER S
APPLICANT: MEZES, PETER S
APPLICANT: MEZES, PETER S
APPLICANT: KAPLAN, DONALD A
APPLICANT: KOHLOM, JEFFREY
ITILE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
INTERER OF EQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Duane C. Ulmer
STREET: P.O. Box 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-471-426-4
                                                                                                                                                                       Sequence 4, Application PC/TUS9401709 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
        APPLICANT: THE DOW CHEMICAL COMPANY
APPLICANT: U.S.A. DEPT. OF HEALTH AND HUMAN SERVICES
TITLE OF INVENTION: A NOVEL FAMILY OF ANTI-CARCINOEMBRYONIC
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS;
ADDRESSEE: Duane C. Ulmer
STREET: P.O. Box 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
LENGTH: 124 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y Match 81.5%;
Local Similarity 80.6%;
hes 100; Conservative
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                                                                                                                                                                                                                                                                                                                        113 TYSA 116
                                                                                                                                                                                                                                                                                          121 AVSS 124
                                                                                                                                                                                                                                                                                                                                                         61 APKFQCKATWITDISSNIAYLQLSSLISEDIAVYYCNIRGLSIMITIRWFFDVWGAGITV 120
                                                                                                                                                                                                                                                                                                                                                                                    61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTIT----FAYWGQGTLV 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EVQLQQSGAELVRSGASVKLSCTASGENIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
Midland
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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Pred. No. 3.4e-44;
4; Mismatches 12;
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ZIP: 48641-1967 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

#1.25

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TITLE OF INVENTION: Monoclonal Antibody to CEA, Conjugates Comprising Said TITLE OF INVENTION: Monoclonal Antibody, and Their Therapeutic Use in an Adept System FILE REPERENCE: Monoclonal Antibody to CEA.
CURRENT APPLICATION NUMBER: US/09/17,945
CURRENT FILING DATE: 1998-10-29
PRIOR APPLICATION NUMBER: GB9703103.3
PRIOR PILING DATE: 1997-02-14
PRIOR APPLICATION NUMBER: GB9609405.7
PRIOR PILING DATE: 1996-05-04
PRIOR PILING DATE: 1996-05-04
PRIOR FILING DATE: 1997-04-29
NUMBER OF SEQ ID NOS: 131
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 19
LENGTH: 255
TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
OTHER INFORMATION: Description of Artificial Sequence: humanized
US-09-171-945-19
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US-09-171-945-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 80.0
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION: APPLICANT: Emery,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19, Application US/09171945 Patent No. 6277599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 124 amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: ULMER, DUANE C
REGISTRATION NUMBER: 34,941
REFERENCE/DOCKET NUMBER: 38,7
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHIN Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/01709
FILING DATE:
CTARGET ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              113 TVSA 116
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Copley, Clive Graham
Edge, Michael Derek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTIT----FAYWGQGTLV 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APKFQGKATMTTDTSSNTAYLQLSSLTSEDTAVYYCNTRGLSTMITTRWFFDVWGAGTTV 120
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81.4%;
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Score 502; DB 3; Pred. No. 1e-43;
               Length 255;
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                                                                                 Matches
80
         61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTITFAYWGQGTLVTVSA 116
                                         20
                                        96; Conservative
APKFRGKATUTADSSSNTAYLHLSSLTSEDTAVYYCHVLIYAGYLAMDYWGQGTSVAVSS 139
                                                                                 8
                                                                                 Mismatches
                                                                               12; Indels
                                                                                4.
                                                                               Gaps
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Search completed: December 29, 2004, 18:09:10 Job time : 31.0177 secs

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - protein search, using sw model
                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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576
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Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478139 segs, 66318000 residues
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                                                                                                                                                                                                          Issued_Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        478139
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| 27                | 26                | 25                | 24                | 23                 | 22                | 21                | 20        | 19               | 18                | 17               | 16   | 15    | 14              | 13   | 12   | 11   | 10               | 9               | œ                | 7               | σ        | ហ            | 4.              | ω      | N                 | н                 | NO.         |
|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-----------|------------------|-------------------|------------------|------|-------|-----------------|------|------|------|------------------|-----------------|------------------|-----------------|----------|--------------|-----------------|--------|-------------------|-------------------|-------------|
| 473               | 473               | 476               | 502               | 504                | 504               | 504               | 509       | 513              | 513               | 517              | 517  | 520   | 520             | 528  | 528  | 528  | 528              | 530.5           | 548              | 548             | 559      | 559          | 559             | 559    | 559               | 559               | Score       |
| 82.1              | 82.1              |                   | 7.                | 7.                 | 87.5              | ?                 | 88.4      | 89.1             | 89.1              | ٩                | 89.8 |       |                 | 91.7 | 91.7 | 91.7 | 91.7             | ۶               | 95.1             | 95.1            | 97.0     | 97.0         | 97.0            | 97.0   | 97.0              | 97.0              | Match       |
| 99                | 99                | 109               | 109               | 109                | 109               | 109               | 115       | 109              | 109               | 109              | 109  | 106   | 106             | 110  | 110  | 110  | 110              | 109             | 128              | 128             | 435      | 415          | 402             | 269    | 269               | 112               | Length      |
| w                 | N                 | N                 | Ŋ                 | ω                  | w                 | N                 | σ         | w                | N                 | w                | N    | N     | N               | ω    | ω    | N    | _                | 4.              | ຫ                | w               | N        | N            | N               | N      | N                 | w                 | 8           |
| US-09-214-095D-92 | US-08-672-345C-91 | -08-672-          | US-08-672-345C-93 | US-09-214-095D-121 | US-09-214-095D-3  | US-08-672-345C-3  | 5215889-3 | US-09-214-095D-2 | -345C-            | US-09-214-095D-1 | ဂု   | -087- | US-08-440-354-2 | ÷    | 052- | 7    | US-08-122-546-14 | US-09-865-483-7 | PCT-US95-15716-2 | US-08-348-548-2 | ö        | -08-491-988- | US-08-491-988-9 | -80-   | US-08-428-257A-72 | US-09-157-370-6   | ij          |
| 92,               | 91,               | Sequence 4, Appli | 93, 7             | 121                | Sequence 3, Appli | Sequence 3, Appli | 5         | 2                | Sequence 2, Appli | ۲,               | ٢    | æ     | e 2, 1          | 6    | 14   | 14   | 14               | e 7,            |                  | e<br>2,         | (D<br>(J | æ            | 9,              | ω<br>, | Œ                 | Sequence 6, Appli | Description |

| 29 462 80.2 200 6 5189147-10 30 450.5 78.2 99 2 US-08-672-345C-92 31 428 74.3 100 3 US-09-214-095D-96 32 426 74.0 99 2 US-08-672-345C-94 33 413.5 71.8 98 3 US-09-216-095D-4 34 343.5 59.6 73 4 US-09-050-861B-5 35 329 57.1 108 3 US-09-240-274-51 36 329 57.1 108 3 US-09-240-274-166 39 316.5 54.9 240 3 US-09-240-274-166 39 316.5 54.9 240 3 US-09-240-274-16 39 316.5 54.9 240 3 US-09-240-274-16 30 315 54.7 108 3 US-09-240-274-53 40 315 54.7 108 3 US-09-240-274-53 41 300 52.1 84 4 US-09-291-299A-8 42 300 52.1 84 4 US-09-291-299A-10 43 265.5 46.1 217 4 US-09-291-299A-7 45 252 43.8 112 2 US-08-665-202-39 |
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| 74.0 99 2 74.0 99 2 74.0 99 2 75.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3 77.1 108 3  |
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## ALIGNMENTS

RESULT 1 US-09-157-370-6

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APPLICANT: STEIPE, Boris
APPLICANT: STEIPE, Boris
APPLICANT: STEINBACHER, Stefan
TITLE OF INVENTION. PROCESS FOR MODIFYING THE STABILITY OF ANTIBODIES
FILE REFERENCE: P8341-8072
CURRENT APPLICATION NUMBER: US/09/157,370A
CURRENT FILING DATE: 1998-09-21
EARLIER APPLICATION NUMBER: 08/765,179
EARLIER FILING DATE: 1997-01-14
EARLIER FILING DATE: 1997-07-06
EARLIER FILING DATE: 1995-07-06
EARLIER APPLICATION NUMBER: PCT/EP95/02626
EARLIER APPLICATION NUMBER: DE/P44 25 115.7
EARLIER FILING DATE: 1994-07-15
INUMBER OF SEQ ID NOS: 10
SOPTWARE: Patentin Ver. 2.1
Sequence 72, Application US/08428257A
Patent No. 5885808
GENERAL INFORMATION:
APPLICANT: Spooner, Robert A.
APPLICANT: Epenetos, A.A.
TITLE OF INVENTION: Compounds to target cells
NUMBER OF SEQUENCES: 80
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jules E. Goldberg
STREET: 261 Madison Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LENGTH: 112
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-157-370-6
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US-08-428-257A-72
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 107;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 97.0%;
Local Similarity 97.3%;
les 107; Conservative
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                                                                                                                                                                                                                                                                                                                                                    61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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CITY: New York STATE: NY COUNTRY:

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USA

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                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/491,988

FILING DATE: 18-DEC-1995

CLASSIFICATION: 424

ATTORNEY/AGENT INFORMATION:

NAME: COLINERS OF THE PORTON HORSES OF THE POR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/08491988
Patent No. 5973116
GENERAL INFORMATION:
APPLICANT: EPENETOS, AGAMEMNON A.
APPLICANT: SPOONER, ROBERT A.
APPLICANT: DEOMARAIN, MAHENDRA
TITLE OF INVENTION: Compounds for targeting
                                                                                                          TELEFAX: 212-818-9479
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
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Best Local Similarity
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PILING DATE: 07/05/95
CLASSIFICATION: 514
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V(
CURRENT APPLICATION DATA;
                                                                                                                                                                                                                                                     NAME: GOLDBERG, JULES E. REGISTRATION NUMBER: 24,408 TELECOMMUNICATION INFORMATION: TELEPHONE: 212-986-4090
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
CORRESPONDENCE MCAULAY NISSEN GOLDBERG KIEL & HAND, LLP
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TOPOLOGY: line-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                                                                                      269 amino acids
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97.3%;
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RESULT 5 US-08-491-988-7

Sequence 7, Application US/08491988
PATENT NO. 5973116
GEMERAL INFORMATION:
APPLICANT: EPERSTOS, AGAMEMNON;

AGAMEMNON A.

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                                                                                                                                             Query Match 97.0%;
Best Local Similarity 97.3%;
Matches 107; Conservative
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Patent No. 5973116
                                                                                                                                                                                                                                                                                                          TELEFAX: 212-818-9479
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: GOLDBERG, JULES E.
REGISTRATION NUMBER: 24,408
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-986-4090
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/491,988
FILLING DATE: 18-DEC-1995
CLASSIFICATION: 424
CCLASSIFICATION: 424
                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: MCAULAY NISSEN GOLDBERG KIEL & HAND, LLP
STREET: 261 MADISON AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: EPENETOS, AGAMENNON A.
APPLICANT: SPOONER, ROBERT A.
APPLICANT: DEONARAIN, MAHENDRA
TITLE OF INVENTION: Compounds for
                                                                                                                                                                                                                                                         TYPE: ami
TOPOLOGY:
                                                                                                                                                                                                                                                                                           LENGTH:
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                                                                               158
                      61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                                                     QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                  QAVVTQESALITSPGETVTLICRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV 60
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97.3%;
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                                                                                                                                             Score 559; DB 2;
Pred. No. 5.7e-48;
0; Mismatches 3
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Pred. No. 3.6e-48;
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                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                PATENT NO. 37,...
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: SPECINETOS, AGAMEMION A.
APPLICANT: SPECONER, ROBERT A.
APPLICANT: DEONARAIN, MAHENDRA
APPLICANT: DEONARAIN, MAHENDRA
APPLICANT: OEONARAIN, MAHENDRA
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Applic
Patent No. 5973116
            COUNTRY: USA
ZIP: 10016-2391
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/491,988
FILING DATE: 18-DEC-1995
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Best Local (
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/491,988
FILING DATE: 18-DEC-1995
CLASSIFICATION: 424
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INFORMATION FOR SEQ ID NO: 7:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
ADDRESSEE: MCAULAY NISSEN GOLDBERG KIEL & HAND, LLP
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ADDRESSEE: MCAULAY NISSEN GOLDBERG KIEL & HAND,
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                                                                                                                                                                                                              CITY: NEW YORK STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 97.0%;
Local Similarity 97.3%;
les 107; Conservative
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CLASSIFICATION:
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   amino acid
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Pred. No. 5.9e-48;
0; Mismatches 3
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RESULT 7
US-08-348-548-2
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                                                          ; MOLECULE TYPE: US-08-348-548-2
                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.0, Version #1.30B
CURRENT APPLICATION DATA:
APPLICATION UNMBR: US/08/348,548
FILING DATB: 01-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 06132/009001
TELEPAX: (617) 542-5070
TELEPAX: (617) 542-5070
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                  Query Match
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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APPLICANT: Kraehenbuhl, Jean Pierre
TITLE OF INVENTION: PCR AMPLIFICATION OF REARRANGED GENOMIC
TITLE OF INVENTION: VARIABLE REGIONS OF IMMUNOGLOBULIN GENES
                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 128 amino acid
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LENGTH: 435 amino acid
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TELEPHONE: 212-986-4090
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CORRESPONDENCE ADDRESS:
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                                                                                              STRANDEDNESS:
TOPOLOGY: lir
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                TYPE: amino acid
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COUNTRY: USA
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  Local
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h 95.1%; Score 548; DB 3; Length 128; Similarity 96.3%; Pred. No. 1.9e-47;
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amino acid
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225 Franklin Street, Suite 3100
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97.3%;
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Pred. No. 6.3e-48;
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RESULT 9
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PCT-US95-15716-2
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GENERAL INFORMATION:
APPLICANT: LEE, Jong Wook et al.
TITLE OF INVENTION: A VARIABLE !
                                                     Sequence 7, Application Patent No. 6680053
                                                                                                                                                                                                                                                                                                        Matches
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US 06
FILING DATE: 01-DEC-1994
ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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TELEPHONE: (617) 542-5070
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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APPLICANT: Kraehenbuhl, Jean Pierre
TITLE OF INVENTION: PCR AMPLIFICATION OF REARRANGED GENOMIC
TITLE OF INVENTION: VARIABLE REGIONS OF IMMUNOCLOBULIN GENES
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DLECULE TYPE: protein
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TYPE: amino acid
STRANDEDNESS: not releva
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REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 06
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225 Franklin Street,
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96.3%;
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 REGION
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Pred. No. 1.9e-47;
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THE MONOCLONAL ANTIBODY AGAINST THE HBV
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US-08-122-546-14
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                                                                Matches
                                                                                Query Match
Best Local Similarity
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
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                                                                                                                                                                                                                                     TELEFAX: (212) 818-94 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: ANTIGEN AND A GENE EIFILE REFERENCE: 1599-01976
CURRENT APPLICATION NUMBER: US/09/865,483
CURRENT FILING DATE: 2001-03-29
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TYPE: PRT
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                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                      NAME: Goldberg, Jules E
REGISTRATION NUMBER: 24,408
REFERENCE/DOCKET NUMBER: JG
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/122,540
FILING DATE: 09/29/93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Courtenay-Luck, Nigel S
TITLE OF INVENTION: MINIMUM RECOGNITION UNIT
TITLE OF INVENTION: TANDEM REPEAT SPECIFIC MC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                       TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                 LENGTH:
                                                              101;
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New York
                 QAVVTQESALITSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                                                                                                                                                 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jules E Goldberg, Esq
                                                                                                                                                                                                                                                                      (212) 986-4090
                                                                                                                                                                                                                                                     818-9479
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                                                                               91.7%;
91.8%;
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93.6%;
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                                                             Score 528; DB 1; 1
Pred. No. 1.6e-45;
2; Mismatches 7;
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Pred. No. 8.9e-46;
3; Mismatches 3
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                                                                                             Length 110;
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                                                             Gaps
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61

PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110

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RESULT 12
US-09-131-052-14
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US-08-764-938-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: GOIDBORY, Jules E REFERENCE/DOCKET NUMBER: JG-E TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 986-4090 TELEPAX: (212) 818-9479 INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                             Sequence 14, Application US/09131052
Patent No. 6107469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 101; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCENTIN Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/764,938
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APPLICANT: Courtenay-Luck, Nigel S
TITLE OF INVENTION: MINIMUM RECOGNITION UNIT OF PEM MUCIN
TITLE OF INVENTION: TANDEM REPEAT SPECIFIC MONOCLONAL ANTIBODY
                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Courte
                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Jules E Goldberg, Esq.
STREET: 261 Madison Avenue
                                                                                                                                               APPLICANT: Courtenay-Luck, Nigel S
TITLE OF INVENTION: MINIMUM RECOGNITION UNIT OF PEM MUCIN
TITLE OF INVENTION: TANDEM REPEAT SPECIFIC MONOCLONAL ANTIBODY
NUMBER OF SEQUENCES: 18
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STREET: New York
CITY: New York
TTATE: New York
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ADDRESSEE: Jules E Goldberg, Esq.
STREET: 261 Madison Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                              STREET: 261 Ma
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10016-2391
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                                         New York
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US-09-131-053A-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (212) 818-9479
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                             TELEFAX: (212) 818-94 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                 ZIP: 10016-2391

ZIP: 10016-2391

COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
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APPLICATION NUMBER: US/09/131,052
FILING DATE: August 7 1000
                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: GOLDBERGY, JULIES E
REFERENCE/DOCKET NUMBER: JG
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 986-4090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Goldberg, Jules E
REFERENCE/DOCKET NUMBER: JG-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 986-4090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Courtenay-Luck, Nigel S
TITLE OF INVENTION: MINIMUM RECOGNITION UNIT OF PEM MUCIN
TITLE OF INVENTION: TANDEM REPEAT SPECIFIC MONOCLONAL ANTIBODY
NUMBER OF SEQUENCES: 18
TOPOLOGY: 1i
                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 110 amino acid
                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: August CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 261 Madison Avenue CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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                                  amino acid
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                                                        110 amino acids
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                    linear
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                                                                                                                 818-9479
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91.8%;
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7, 1998
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                                                                                                                                                                                                                                                                                                             Version #1.25
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                                                                            Matches
                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/013,166
FILING DATE: 02-FEB-1993
APPLICATION NUMBER: US/07/664,789
FILING DATE: 05-MAR-1991
APPLICATION NUMBER: DE 4007079.4
FILING DATE: 07-MAR-1990
ATTORNEY/AGENT INFORMATION:
NAME: LAVIN Jr., LAWZENCE M.
REGISTRATION NUMBER: 30,768
REFERENCE/DOCKET NUMBER: HOAG-1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence 2, Application US/08440354 Patent No. 5907034
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Boblet, Klaus
APPLICANT: Hermentin, Peter
APPLICANT: Seemann, Gerhard
TITLE OF INVENTION: A Monoclo
TITLE OF INVENTION: Metals fr
                                                                                                                                                                                                                                                                       TELEPHONE: (202) 408-4 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                            TYPE: amino a STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Finnegan, Hender
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/440,354 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                   LENGTH:
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                          4 VTQESALTTSPGETVTLICRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGVPAR 63
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                                                                   Score 520; DB 2; ]
Pred. No. 9.6e-45;
2; Mismatches 5;
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Search completed: December 29, 2004, 18:09:12 Job time : 20.9823 secs
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                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-463-087-2
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US-08-463-087-2
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/07/664,789
FILING DATE: 05-MAR-1991
APPLICATION NUMBER: DE 4007079.4
FILING DATE: 07-MAR-1990
ATTORNEY/AGENT INFORMATION:

NAME: LAVIN UT., LAWTENCE M.

REGISTRATION NUMBER: 30,768
                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (202) 408-
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEGISTRATION NUMBER: 30,768
REFERENCE/DOCKET NUMBER: HOAG-1043
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 20005
COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: A Monoclonal Antibody Against Complexed TITLE OF INVENTION: and No. 5908790Complexed Complexing Agentific OF INVENTION: Metals from Aqueous Solutions and for A
                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: si
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STREET: 1300 I Street, N.W.
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Pred. No. 9.6e-45;
2; Mismatches 5
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         Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being predicted by analysis of the total score distribution.
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701.451 Million cell updates/sec
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Copyright (c) 1993 - 2004 Compugen Ltd.
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KVMSII
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| 436 77.7 129 2 S40317  436 77.7 129 2 S40317  437 17.7 129 2 S46376  438 77.5 117 2 S46376  439 77.6 110 2 S44118  430 77.0 107 2 S36269  432 77.0 107 2 S36269  432 77.0 108 1 K1HUHU  432 77.0 108 1 K1HUHU  432 77.0 108 1 K1HUHU  432 77.0 141 2 A49134  430 76.6 98 2 PH1065  428 76.3 109 2 S31998  428 76.3 131 2 S40352  427 76.1 108 1 K1HUAR  428 76.0 124 2 S40336  427 76.1 108 1 K1HUAR  427 76.1 108 1 K1HUAR  428 76.0 124 2 S40336  429 76.1 108 1 K1HUAR  420 76.1 108 1 K1HUAR  421 76.1 108 1 K1HUAR  422 76.1 108 1 K1HUAR  423 76.1 108 1 K1HUAR  424 76.0 124 2 S40336  425 76.0 124 2 S40336  426 75.9 108 1 K1HUKU  427 428 75.9 108 1 K1HUKU  | 5       | 4      | ü       | ັນ     | Ξ       | 40      | 39      | 8      | 7      | 6      | 35     | 34     | 33             | 32     | <u>۳</u> | Ġ      |
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| Ig kappa   | μ       | N      | Н       | _      | _       | μ       | N       | N      | N      | N      | -      | N      | N              | N      | N        | N      |
| kappa<br>kappa<br>kappa<br>lambdi<br>kappa<br>kappa<br>kappa<br>kappa<br>kappa<br>kappa<br>kappa<br>kappa   | KTHUKU  | S40336 | KTHULY  | KIHUGL | K1HUAG  | KIHUAR  | S40352  | S31998 | PH1065 | A49134 | KIHUHU | S36269 | S44118         | S46376 | S52793   | S40317 |
| 222222222222222   |         |        |         |        |         |         |         |        |        |        |        |        |                |        |          |        |
|   | r kappa | kappa  | r kappa | kappa  | , kappa | , kappa | , kappa | kappa  | kappa  | kappa  | kappa  | lambdi | Ig kappa chain |        |          |        |

## ALIGNMENTS

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A; Introns:
C; Complex:
                                                                                                                                                                                                                                                                                                         RESULT 2

KVMST1

IQ kappa chain precursor V region (T1) - mouse

C;Species: Mus musculus (house mouse)

C;Date: 31-Dec-1980 #sequence_revision 08-Oct-1981 #text_change 09-Jul-2004

C;Accession: A01920

C;Accession: A01920
                                                                                                                                                                                   R;Altenburger, W.; Steinmetz, M.; Zachau, H.G.
Nature 287, 603-607, 1980
A;Title: Functional and non-functional joining in immunoglobulin light chain genes
A;Reference number: A01920; MUID:81052342; PMID:8776411
A;Accession: A01920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S52447

Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 08-May-1995 #sequence_revision 21-Jul-1995 #text
C;Accession: S52447
R;Berdoz, J.; Kraehenbuhl, J.P.
R;Accession: S52447
                                                                           A;Cross-references: UNIPROT:P01637;
A;Note: the sequence was determined
                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-128 < ALT>
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A;Introns: 17/1
C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin P;36-110/Domain: immunoglobulin homology <IMM>
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A;Molecule type: DNA
A;Residues: 1-127 <BER>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X82688; NID:g673443; PIDN:CAA58009.1; PID:g673444
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Best Local S
Matches 89
                                                        ;Genetics:
An immunoglobulin heterotetramer subunit consists of two identical light (ka
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Similarity 83.2%; Pred. No. 7.1e-35;
B9; Conservative 13; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESGSGSGODYSLTISSLEYEDMGIYYCLOFDEFPYTFGGGTKLEIK 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                           GB:V00772; NID:g51636; PIDN:CAA24150.1; from the differentiated gene
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C;Superfamily: immunoglobulin V region; imm C;Keywords: heterotetramer; immunoglobulin F;1-20/Domain: signal sequence #status predicts F;21-114/Domain: V segment #status predicts
                                                                                                                                                         MO1. Immunol. 26, 371-382, 1989
A;Title: Characterization of the heavy and A;Reference number: PLO100; MUID:89238344;
A;Accession: PLO101
                                                                     A; Introns: 17/1
                                                                                              A;Experimental source: strain A/J
A;Note: the Vk40-140 gene segment
                                                                                                                                                                                                                                               _g kappa chain precursor V region (40-140) - mouse
C;Species: Mus musculius (house mouse)
C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 21-Jan-2000
C;Accession: PL0101
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A;Title: Construction and characterization of a recombinant murine monoclonal A;Reference number: S14236; MUID:91006173; PMID:2209622
A;Accession: S14237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Keywords: heter F; 36-110/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:X56394; NID:951622;
C;Superfamily: immunoglobulin V region; immur
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                 ;Molecule type: DNA
;Residues: 1-128 <NEA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ig kappa chain precursor (15C5) - mouse (75pecies: Mus musculus (house mouse) C;Date: 25-Feb-1994 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
                                                                                        Genetics:
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C;Superfamily: immunog
C;Keywords: heterotetr
F;1-20/Domain: s;rmai
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Best Local (
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87; Conserv
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81.3%; pred. No.
ve 13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83.8%; Score 470; DB 2;
81.3%; Pred. No. 3e-33;
tive 11; Mismatches
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predicted <VRI
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Pred. No. 7.6e-34;
                                                                                              эď
                                            immunoglobulin
                                                                                              classified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1622; PIDN:CAA39805.1; immunoglobulin homolog
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immunoglobulin ho
                                                                                                                                                                          light chain
PMID:2497340
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1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS

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A;Molecule type: mRNA
A;Rosidues: 1-125 <KLE>
A;Rosidues: 1-125 <KLE>
A;Cross-references: EMBL:X72443; NID:g441354; PIDN:CAA51111.1; PID:g441355
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
C;Keywords: heterotetramer; immunoglobulin
F;34-108/Domain: immunoglobulin homology <IMM>
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R;Klein, R.; Jaenici
Eur. J. Immunol. 23
                                                                                                                                                                                                                                                                                                                                                           R;Klein, R.; Jaenichen, R.; Zachau, H.G.
Bur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi genes and tl
A;Reference number: $40312; MUID:94080891; PMID:8258341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Homo sapiens (man)
C;Date: 19-May-1994 #sequence_revision 26-May-1995 #text_change
                                                                                                                                                                                                                                                                                               A;Status: preliminary; translation not shown
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C;Species: Homo sapiens (man)
C;Date: 19-May-1995 #sequence_revision 21-Jul-1995 #text_change 21-Jan-2000
C;Accession: $52789
R;Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, P.; Denoroy, submitted to the EMBL Data Library, March 1995
A;Pescription: Light chain V region gene usage restriction and peculiarities in the company of the com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:X85995; NID:9758588; PIDN:CAA59987.1; C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;38-112/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-129 < ROC>
                                                        Query Match
Best Local :
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A; Accession: S52789
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                                            Similarity
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               Conservative
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: J segment #status predicted
   80.6%; Score 452; DB 2;
78.5%; Pred. No. 5.7e-32;
cive 14; Mismatches 9
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Pred. No. 4.8e-32;
9; Mismatches 12
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Pred. No. 1.5e-32;
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A;Experimental source: thymic B lymphocytes
A;Note: sequence extracted from NCBI backbone (NCBIN:113208, NCBIP:113209)
C;Superfamily: immunoglobulin V region; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R.Victor, K.D.; Pascual, V.; Williams, C.L.; Lennon, V.A.; Capra, J.D. Eur. J. Immunol. 22, 2231-2236, 1992
A;Title: Human monoclonal striational autoantibodies isolated from thymic B lymphocytes A;Reference number: A49047; MUID:92387224; PMID:1516616
A;Accession: B49047
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A;Title: Human anti-self antibodies with high specificity from phage display libraries A;Reference number: S36256; MUID:93178448; PMID:767990
A;Accession: S36264
A;Status: preliminary; nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-107 <GRI>
A;Residues: 1-107 <GRI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ig lambda chain V region (clone alpha-CEA4-8A) - hu (;Species: Homo sapiens (man) C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 C;Accession: S36264
    RESULT
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A; Residues: 1-108 < VIC>
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Best Local S
Matches 88
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Best Local S
Matches 85
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                                                                    RFSGSGSGTDFTLTISSLQPEDFATYYCQQSYSTPLTFGGGTKVBIK 107
                                                                                                RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                  DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RFSGSGSGTDFTLTISSLQPEDFATYYCQQYSNYPLTFGGGTKVDIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
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                                                                                                                                                                                                                                                                                                                                 immunoglobulin homology
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79.4%; Pred. No. 6e-32;
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Pred. No. 6e-32;
6; Mismatches
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    human (fragment)

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                                                                                                  RESULT 11
$40313
$40313
Equation 19 kappa chain V-J region - human
C;Species: Homo sapiens (man)
C;Date: 19-May-1994 #sequence_revision 26-May-1995
C;Date: 19-May-1994 #sequence_revision 26-May-1995
A; Title: Expressed A; Reference number:
                                           Eur. J. Immunol.
                                                             C;Accession: S40313
R;Klein, R.; Jaenichen, R.; Zachau, H.G.
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Ig kappa chain - human
C;Species: Homo sapiens (man)
C;Date: 06-Mar-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C;Accession: $40334
R;Klein, R.; Jaenichen, R.; Zachau, H.G.
Bur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi genes and their hypermutation.
A;Reference number: $40312; MUID:94080891; PMID:8258341
A;Accession: $40334
A;Accession: $40334
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C;Accession: $40369

C;Accession: $40369

C;Accession: $40369

A;Cithe: Expressed human immunoglobulin chi genes and their hypermutation.

A;Reference number: $40312; MUID:94080891; PMID:8258341

A;Accession: $40369
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C;Species: Homo sapiens (man)
C;Date: 06-Mar-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C;Accession: S40369
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A;Ross-references: RMBL:X72444
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;37-111/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: mRNA
A;Residues: 1-129 <KLE>
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                                                                                                                                                                                                                                                                                        ;Cross-references: EMBL:X72479; NID:g441426; PIDN:CAA51147.1; PID:g441427; Superfamily: immunoglobulin V region; immunoglobulin homology; Keyworda: heterotetramer; immunoglobulin; heterotetramer; immunoglobulin; 37-111/Domain: immunoglobulin homology <IMM>
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Best Local
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                      61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFFYTFGGGTKVEIK 107
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KFSGSGSGTDFTLTISSLQPEDFATYYCQQYNSYPYTFGQGTKLEIK
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                                                                                                                                                                                                                      Score 449; DB 2;
Pred. No. 1.1e-31;
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Pred. No. 8.8e-32;
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human immunoglobulin chi : \$40312; MUID:94080891; |

i genes and t PMID:8258341

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nypermutation

#text\_change

21-Jan-2000

3248-3271,

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A;Cross-references: UNIPROT:P01594
A;Note: the C region of this chain has the Inv (3) marker
R;Fehlhammer, H.; Schiffer, M.; Epp, O.; Colman, P.M.; Lattman, E.E.; Schwager,
Biophys. Struct. Mech. 1, 139-146, 1975
A;Title: The structure determination of the variable portion of the Bence-Jones
A;Reference number: A90729; MUID:77022433; PMID:1234024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Mus muscu
C;Date: 20-Feb-1995;
C;Accession: S20652
R;Losman, M.; Fasy,
                                                                                                                                                                     R;Schiechl, H.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 353, 345-370, 1972
A;Title: Die Primaerstruktur einer monoklonalen Immunglobulin-L-Kette vom kappa-Typ, A;Reference number: A91653; MUID:72189444; PMID:5028201
                                                                                                                                         A; Molecule type: protein A; Residues: 1-108 < SCH>
                                                                                                                                                                                                                                                                                     Ig kappa chain V-I region (Au) - human C;Species: Homo sapiens (man) C;Date: 24-Apr-1984 #sequence revision 02-Jul-1998 #text_change C;Accession: A91653; A01862; S02573
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A,Description: Relationships among antinuclear antibo A,Reference number: $20639
A,Reference number: $20639
A,Accession: $20652
A,Status: preliminary
A;Molecule type: DNA
A,Residues: 1-106 <LOS>
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: EMBL;X65008; NID:g52649; PIDN:CAA46141.1; PID:g52650 C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;16-90/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                Molecule type:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Accession: S40313
A;Status: preliminary; (
A;Molecule type: mRNA
A;Residues: 1-123 <KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEI 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DIKMTQSPSSMYASLGERVTITCKASQDINSYLNWFQQKPGRSPRTLIYRSNRLVHGVPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79.5%; Score 446; DB 2; Length 106; 77.4%; Pred. No. 1.6e-31; tive 15; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79.7%;
81.3%;
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Pred. No. 1.5e-31;
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R;Schormann, N.; Murrell, J.R.; Liepnieks, J.J.; Benson, M.D.
Proc. Natl. Acad. Sci. U.S.A. 92, 9490-9494, 1995
A;Title: Tertiary structure of an amyloid immunoglobulin light chain protein: A propose; A;Reference number: 139154; MUID:96003804; PMID:7568160
A;Accession: I39154
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-108 <- KESA
A;Res
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I39154
                                                                                                                                                                                                                                                                                                                                                                                                                                                          F;16-90/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change
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(C;Complex: an immunoglobulin heterotetramer subunit consists of two identical light (ka C;Complex: an immunoglobulin heterotetramer subunit consists of two identical light (ka hain disulfide bonds; in some cases, such as IgA and IgM, the subunits associate into l C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin c;16-90/Domain: immunoglobulin homology <IMM>
F;13-80/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Accession:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Cross-references: GDB:136264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Steiner, V.; Chang, FEBS Lett. 222, 6-10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Contents: annotation; X-ray crystallography
A; Note: the structure of the V region was determined by molecular replacement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Gene: GDB:IGKV1
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Best Local :
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                                                                                                                                                                                                             1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
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RFSGSGSGTEYTFTISSLÓPEDIATYYCOÓYDDLÞÝTFGOGTKVEIK 107
                                                      RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                   DIQWTQSPSSLSASVGDRVTITCQASQDISDYLIWYQQKLGKAPNLLIYDASTLETGVPS
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79.4%;
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                                                                                                                                                                                                                                                                                           Score 444; DB 2;
Pred. No. 2.4e-31;
6; Mismatches 15
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Pred. No. 2.4e-31;
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C;Species: Homo sapiens (man)
C;Date: 19-May-1994 #sequence\_revision 21-Jul-1995 #text\_change 21-Jan-2000
C;Accession: \$40349
R;Klein, R.; Jaenichen, R.; Zachau, H.G.
Bur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi genes and their hypermutation.

RESULT 15 S40349

Ig kappa chain V-J region -C;Species: Homo sapiens (man

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Result
No.
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM protein - protein search, using sw model
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                                                                                                                                                                                                                                                                                           Score
                Published Applications AA:*

1: /cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/USO6_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                       Query
Match
              100.0
100.0
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561
1 DIQWTQSPSSLSASVGDRVT......CLQYDEFPYTFGGGTKVEIK 107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         December 29, 2004, 18:05:34; Search time 61.8643 Seconds (without alignments)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Cgn2_6/ptodata/2/pubpaa/US09E PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US09C PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US09NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10A PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10B PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10C PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10C PUBCOMB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US11NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US11NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10NEW PUB.pep: */
Cgn2_6/ptodata/2/pubpaa/US10NEW PUB.pep: */
                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
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US-10-472-995A-122
US-10-177-996-19
US-10-774-076-11
US-10-340-189-27
US-10-340-189-27
US-10-462-062-107
US-10-462-062-117
US-10-472-995A-122
US-10-472-995A-122
US-10-127-890-125
US-10-340-189-87
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                                                                                                                                                                                                                             US-10-774-076-14
US-10-774-076-19
                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
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      Sequence 14, Appl
Sequence 20, Appl
Sequence 21, Appl
Sequence 31, Appl
Sequence 27, Appl
Sequence 27, Appl
Sequence 17, Appl
Sequence 107, Appl
Sequence 107, Appl
Sequence 182, Appl
Sequence 182, Appl
Sequence 122, Appl
Sequence 122, Appl
Sequence 122, Appl
Sequence 123, Appl
Sequence 125, Appl
Sequence 127, Appl
                                                                                                                                                                                                                                                                                       Description
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| 5               | 44              | 3               | 12              | 11               | ö            | 39              | 8     | 37      | 8          | 5                 | 4                 | ü                 | 2                 | 3                 | ŏ                 | 29                 | 8       | 27                | 8                | 25            | 24  | 23                | 22      | 21                | 8     | 19    | 18                | 17   | 9   | 15   | 14                |
|-----------------|-----------------|-----------------|-----------------|------------------|--------------|-----------------|-------|---------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|---------|-------------------|------------------|---------------|-----|-------------------|---------|-------------------|-------|-------|-------------------|------|-----|------|-------------------|
| 473             | 473             | 473             | 473             | 482              | 482          | 483             | 485   | 487     | 487        | 487               | 487               | 487               | 487               | 487               | 487               | 489                | 489     | 489               | 489              | 491           | 491 | 491               | 493     | 493               | 493   | 493   | 495               | 495  | 496 | 496  | 498               |
| 84.3            | 84.3            | 84.3            | ٠               |                  | ٠            | ٠               | 86.5  | •       |            | •                 |                   | 86.8              | •                 | •                 |                   | 87.2               |         | ٠                 |                  | 87.5          |     | ٠                 | ٠       |                   | 87.9  |       | 88.2              | 88.2 |     | 88.4 | 88.8              |
| 142             | 142             | 142             | 142             | 107              | 107          | 107             | 107   | 127     | 127        | 127               | 127               | 107               | 107               | 107               | 107               | 127                | 127     | 107               | 107              | 4852          | 663 | 107               | 127     | 127               | 107   | 107   | 240               | 240  | 107 | 107  | 107               |
| 17              | 14              | 9               | 9               | 15               | 14           | 15              | 15    | 16      | 16         | 15                | 15                | 16                | 16                | 15                | 15                | 16                 | 15      | 16                | 15               | 15            | 15  | 15                | 16      | 15                | 16    | 15    | 14                | 14   | 15  | 15   | 15                |
| US-10-819-493-4 | US-10-162-396-4 | US-09-844-736-4 | US-09-797-481-2 | US-10-325-696-26 | -10-340-189- | US-10-412-406-6 | -406- | -10-472 | -472-905A- | US-10-462-062-183 | US-10-462-062-181 | US-10-472-905A-98 | US-10-472-905A-90 | US-10-462-062-109 | US-10-462-062-101 | US-10-472-905A-119 | -10-462 | US-10-472-905A-82 | US-10-462-062-93 | -10-412-406-3 | -41 | -412              | -10-472 | US-10-462-062-180 | 0-472 | N     | US-10-127-890-148 | Ļ    | Ļ   | •    | US-10-325-696-65  |
| 4               | e<br>4          | 4,              | 'n              | 2                | 26           | φ,              | æ     | 12      | 12         | 183               | 181               | e 98,             | 90,               | e 109,            | 101               | Sequence 119, App  | 179,    | 82,               | 93,              | 33,           | 32  | Sequence 8, Appli | 12      | 18                | e 88, | e 99, | e 148,            | 14   | ۲   | 33   | Sequence 65, Appl |

## ALIGNMENTS

RESULT 1 US-10-774-076-14

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                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 39
SOFTWARE: PatentIn version 3.2
SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14, Application US/10774076 Publication No. US20040210040A1 GENERAL INFORMATION:
                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OF INVENTION: PROTISSIS
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
                                                                                                                                                                                                                                                                          LENGTH: 107
TYPE: PRT
                                                                                                                                                                                                                      OTHER INFORMATION: Humanized antibody
                                                                                                                                                                                                                                      ORGANISM: Artificial FEATURE:
61
                                13
                                                                                                  μ
                     RFSGSGSQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                             DIOMTOSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                   100.0%; Score 561; DB 17; 100.0%; Pred. No. 1.6e-40;
                                                                                                                                   0; Mismatches
                                                                                                                                   Indels
                                                                                                                                                                   Length 107;
                                                                                                                                   0;
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                                                                  60
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RESULT

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RESULT 3
US-09-158-120A-20
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                          CLASSIFICATION:
PRIOR APPLICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/290,592
FILING DATE: August 15, 1994
APPLICATION NUMBER: 07/813,372
FILING DATE: December 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Olstein, Ellict M.
REGISTRATION NUMBER: 24,025
REFERENCE/DOCKET NUMBER: 469201
TELECHOMUNICATION INFORMATION:
TELEPHONE: 973-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: Humanized antibody
US-10-774-076-19
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20, Application US/09158120A Patent No. US20020102257A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin version 3.2
DENCITE: 127
LENGTH: 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19, Application US/10774076
Publication No. US20040210040A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                        COMPUTER: p160
OPERATING SYSTEM: Windows95
SOFTWARE: MS Word 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/158,11
FILING DATE: September 21, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OP INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OP INVENTION: Psoriasis
                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
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ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Human Murine Chimeric Antibodies Against
   TELEPHONE: 973-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI
                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107;
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NEW JERSEY
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                                                                 469201-367
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Pred. No. 1.9e-40;
; Mismatches 0;
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; ORGANISM: mus sp. US-10-774-076-11
                                                                                                                                                                                    RESULT 74-076-11
US-10-774-076-11
US-10-774-076-11
; Sequence 11, Application US/10774076
; Publication No. US20040210040A1
; GENERAL INFORMATION;
; APPLICANT: Protein Design Labs, Inc.
; APPLICANT: Landolfi, et al.
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                                                   FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.2
SEQ ID NO 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: mus
US-10-774-076-3
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                                                                                                                                                   TITLE OF INVENTION: Amphiregulin Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Amphiregulin Antibodies
TITLE OF INVENTION: Amphiregulin Antibodies
FILE REFERENCE: 05882,0064,NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILLIG DATE: 2004-02-06
NUMBER OF SCO. **
                                            LENGTH:
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Protein APPLICANT: Landolf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 107
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: AMINO ACID
TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 107 AMINO ACIDS
TYPE: AMINO ACID
                                                 127
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                                                                                                                                                                                                                                                                                                                                                                                              1 DIQMTQSFSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAFKTLIYRANRLVDGVPS
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                                                                                                                                                                                                                                                                                                                  ŔŶŚĠŚĠŚĠQDŶSĿŤIŚŚĿEYEDMGIŸŸĊĿQŶDĔŶŶŸŤŶĠĠĠŤĸĿĔĬĸ 107
                                                                                                                                                                                                                                                                                                                                            RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDBFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                            DIKWTÓŚPŚŚMYAŚLÓERVTITCKASODINSYLSWPOOKPGKSPKTLIYRANRLYDGYPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DIQMTQSPSTLSASVGDRVTITCKASQDINRYLNWYQQKPGKAPKLLIYRANKLVDGVPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               89.7%;
87.9%;
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Pred. No. 1.4e-35;
B; Mismatches 5;
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Pred. No. 3.7e-36;
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                                                                                                                                                                and Their
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                                                                                                                                                           Treat Cancer and
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TYPE: amino acids

; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-340-189-27
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                                                                                                                        Best Loc
Matches
                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                               TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 27:
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APPLICANT: Stud
                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: MCNicholas, Janet M.
REGISTRATION NUMBER: 32,918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
APPLICATION UMBER: US/10/340,189
FILING DATE: 10-Jan-2003
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Modified Antibody Variable Domains
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/245,202A
FILING DATE: «Unknown»
APPLICATION NUMBER: 08/082,842
FILING DATE: 23-UN-1993
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
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RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                              DIQMTQSPSSMSASLGDRVTITCRASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                             DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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STATE: Illinois
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                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 11023US07 / 200-71.P2.C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 312/707-9155
                                                                                                                                                                                                                                                                               LENGTH: 107 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: McAndrews, Held & Malloy, Ltd.
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                                                                                                                                        89.5%;
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87.9%;
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                                                                                                                    Score 502; DB 14;
Pred. No. 1.8e-35;
5; Mismatches 6;
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Pred. No. 1.7e-35;
3; Mismatches 5
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                                                                                                                                                      Length 107;
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US-10-462-062-107
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US-10-325-696-27
                                          GENERAL
                                                           Sequence 107, Appublication No.
                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
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APPLICANT: SATO, APPLICANT: ADAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Janet M. McNicholas, I
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 110
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 27:
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ADDRESSEE: McAndrews, Held & Malloy, Ltd.
STREET: 500 West Madison Street, 34th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
                                      INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICANT: Studnicka,
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                                                                                                                                                                                                                          61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                 95;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/097,980
FILING DATE: 16-JUN-1998
APPLICATION NUMBER: 08/107,669
FILING DATE: 13-AUG-1993
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
                                                                                                                                                                                                                                                                                                       1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                   RESGSGSGTDYTLTISSLQYEDEGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                DIQMTQSPSSMSASLGDRVTITCRASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 18-Dec-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 312/707-9050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 107 amino acids
                                                       Application US/10462062 o. US20040044187A1
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                   KOH
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                                                                                                                                                                                                                                                                                                                                                                  Score 502; DB 15;
Pred. No. 1.8e-35;
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CANT: ADACHI, HIDEKI
OF INVENTION: HUMANIZED ANTIBODIES AGAINST HUMAN TISSUE FACTOR (TF)

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US-10-472-905A-96
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                                                                                                                                                                 Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 96, Application US/10472905A Publication No. US20040180051A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/472,905A
CURRENT FILING DATE: 2003-09-25
PRIOR APPLICATION NUMBER: PCT/JP02/02933
PRIOR FILING DATE: 2002-03-26
PRIOR APPLICATION NUMBER: JP 2001-088387
PRIOR FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 123
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TITLE OF INVENTION: BLOOD RHEOLOGY-IMPROVING AGENT
FILE REFERENCE: 053466-0368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 107
                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: amino acid sequence of version "b1" OTHER INFORMATION: chain V region
                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR PILING DATE: 1998-04-03
NUMBER OF SEO ID NOS: 183
SOFTMARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: AND PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/462,062
CURRENT FILING DATE: 2003-06-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: OTHER INFORMATION:
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TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                         ENGTH: 107
                                                                                                                                                               Local
                       61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVBIK 107
       61
                                                                                                                                               96;
                                                                                           1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
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                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96;
                                                              DIQMTQSPSSLSASVGDRVTITCKASQDIKSFLSWFQQKPGKSPKTLIYYATSLADGVPS
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                                                                                                                                           Conservative
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                                                                                                                                                        88.9%;
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                                                                                                                                        ; Score 499; DB; Pred. No. 3.2e
3; Mismatches
OPEDFATYYCLÓHGESPYTFGGGTKVEIK 107
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Pred. No. 3.2e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of Artificial Sequence: Amino acid "b1" of humanized L chain V region
                                                                                                                                                        DB 16;
3.2e-35;
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3.2e-35;
                                                                                                                                        8
                                                                                                                                                                       Length 107;
                                                                                                                                      Indels
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US-10-462-062-182

RESULT 10

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ITILE OF INVENTION. BLOOD RHEOLOGY-IMPROVING AGENT
ITILE OF INVENTION. BLOOD RHEOLOGY-IMPROVING AGENT
CURRENT APPLICATION NUMBER: US/10/472,905A
CURRENT FILING DATE: 2003-09-25
PRIOR APPLICATION NUMBER: PCT/JPD2/02933
PRIOR FILING DATE: 2002-03-26
PRIOR FILING DATE: 2001-03-26
PRIOR FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 123
SOFTWARE: Patentin Ver. 3.2
LENGTH: 127
TYPE: PRT
ORGANISM: Artificial Sequence
FRATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: ADACHI, HIDEKI
ITILE OF INVENTION: HUMANIZED ANTIBODIES AGAINST HUMAN TISSUE FACTOR (TF)
ITILE OF INVENTION: HUMANIZED ANTIBODIES
CURRENT APPLICATION NUMBER: US/10/462,062
CURRENT FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR APPLICATION NUMBER: D199-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR PILING DATE: 1999-04-03
NUMBER OF SEQ ID NOS: 183
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 182
LENGTH: 127
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US-10-472-905A-122
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Publication No. US2000

GENERAL INFORMATION:

APPLICANT: SUZUKI, KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-462-062-182
                                                                                                                             Matches
                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                             PEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: amino acid sequence of version "b1" of OTHER INFORMATION: humanized L chain V region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 182, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Full-length amino acid OTHER INFORMATION: sequence of version "bl" of humanized L chain V region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SATO, APPLICANT: ADAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                             Local
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61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18
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                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96;
                                     DIQMTQSPSSLSASVGDRVTITCKASQDIKSFLSWFQQKPGKSPKTLIYYATSLADGVPS
                                                                          DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DIOMTOSPSSISASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RFSGSGSGTDYTLTISSLÓPEDFATYYCLQHGESPYTFGGGTKVEIK 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10472905A
o. US20040180051A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10462062 o. US20040044187A1
                                                                                                                           Conservative
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                                                                                                                                         88.9%;
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                                                                                                                                         Score 499; DB 16;
Pred. No. 3.8e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 499; DB 15;
Pred. No. 3.8e-35;
3; Mismatches 8;
                                                                                                                       Mismatches
                                                                                                                                                      Length 127;
                                                                                                                     Indels
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                                                                                                                 Gaps
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US-10-127-890-125
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                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                      TELEX: 650 388-1248
INFORMATION FOR SEQ ID NO: 125:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/127,890
FILING DATE: 23-Apr-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: MCNIcholas, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 200
TELECOMMUNICATION IMFORMATION:
TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/787,567 FILING DATE: 04-NOV-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Better, Marc D.
Carroll, Stephen F.
Studnika, Gary M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating
61
                                 61
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CITY: Chicago
STATE: Illinois
                                                                                             DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
                             RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
RFSGSGSGTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                     DIQMTQSPSSLSASVGDRVTITCRASQDINSYLSWFQQXFGKAFKTLIYRANRLESGVPS
                                                                                                                                                                                                                                                                                                                       TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/988,430 FILING DATE: 09-DEC-1992 APPLICATION NUMBER: US 07/901,707 FILING DATE: 19-JUN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US94/05348
FILING DATE: 12-MAY-1994
APPLICATION NUMBER: US 08/064,691
FILING DATE: 12-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/646,360 FILING DATE: 13-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 60661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: McAndrews, Held & Malloy, Ltd.
STREET: 500 West Madison Street, 34th floor
                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      312/707-9155
                                                                                                                                                                 88.8%;
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                                                                                                                                                                   Score 498; DB 14;
Pred. No. 3.9e-35;
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                                                                                                                                                                                   DB 14;
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                                                                                                                                                                                 Length 107;
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US-10-340-189-87
                                                                                                                                                                      Matches
                                                                                                                                                                                                          Query Match
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Publication No. US20030229207A1
GENERAL INFORMATION:
                                                                                                                                                                                          Best Local
                                                                                                                                                                                                                                                                                                                                                                                  TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 87:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:

APPLICATION UNMER: US/09/245,202A

PILING DATE: <Unknown>
APPLICATION NUMER: 08/082,842

PILING DATE: 23-JUN-1993

APPLICATION NUMER: PCT/US92/10906

PILING DATE: 14-DEC-1992

APPLICATION NUMER: US 07/808,464

FILING DATE: 13-DEC-1991

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/340,189
FILING DATE: 10-Jan-2003
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: MCNISCHOLAB, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11023US07 / 200-71.P2.C2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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TITLE OF INVENTION: Modified Antibody Variable Domains
NUMBER OF SEQUENCES: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
  61
                                                                                                                                                                      ; 96
                                       61 RESGSGSGODYTLTISSLOPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                          1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
                                                                                                                                                                                          Similarity
RFSGSGSTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                             DIOMTOSPSSLSASVGDRVTITCRASODINSYLSWFQQKPGKAPKTLIYRANRLESGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 312/707-8889
TELEFAX: 312/707-9155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 60661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Chicago
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STREET: 500 W. Madison Street, 34th Floor
                                                                                                                                                                                                                                                                                                                                                              ENGTH: 107 amino acids
                                                                                                                                                                      Conservative
                                                                                                                                                                                      88.8%;
                                                                                                                                                                                                                                                                            SEQ ID NO: 87:
                                                                                                                                                                    Mismatches
                                                                                                                                                                                        Score 498; DB 14;
Pred. No. 3.9e-35;
                                                                                                                                                                                                            DB 14;
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                                                                                                                                                                                                          Length 107;
                                                                                                                                                                    Indels
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                                                                                                                                                                    Gaps
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US-10-325-696-65
; Sequence 65, Application US/10325696
; Publication No. US20040005630A1
; GENERAL INFORMATION:
; APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
; NUMBER OF SEQUENCES: 67

RESULT 14

CORRESPONDENCE ADDRESS:
ADDRESSEE: McAndrews, Held & Malloy, Ltd.
STREET: 500 West Madison Street, 34th Floor

CITY: Chicago

COUNTRY: United States of America

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APPLICATION NUMBER: US/09/097,980

RILING DATE: 16-JUN-1998

APPLICATION NUMBER: 08/107,669

FILING DATE: 11-AUG-1993

APPLICATION NUMBER: PCT/US92/10906

FILING DATE: 11-DEC-1992

APPLICATION NUMBER: PCT/US92/10906

FILING DATE: 13-DEC-1991

APPLICATION NUMBER: US 07/808,464

FILING DATE: 13-DEC-1991

ATTORNEY/AGENT INFORMATION:

NAME: Janet M. MCNicholas, Ph.D.

REGISTRATION NUMBER: 32,918

REFERENCE/DOCKET NUMBER: 11023US06/200-71.P1.C3

TELEPHONE: 312/707-8889

TELEPHONE: 312/707-9050

INFORMATION FOR SEQ ID NO: 65:

SEQUENCE CHARACTERISTICS:

LENGTH: 107 amino acids

TYPE: amino acids

TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              Sequence 33, Application US/10436782
Publication No. US20040028685A1
CURRENT FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 05/179,322
PRIOR FILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/418,213
PRIOR FILING DATE: 2002-10-14
PRIOR APPLICATION NUMBER: 60/418,213
PRIOR APPLICATION NUMBER: 60/418,213
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                APPLICANT: Langermann, Solomon
TITLE OF INVENTION: EphA2 Monoclonal Antibodies and Methods of Use Thereof
FILE REFERENCE: 10271-097
                                                                                                                                                                                                                                                          APPLICANT: Kinch, Michael
APPLICANT: Carles-Kinch, Kelly
APPLICANT: Kiener, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 65:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 DIOWTOSPSSLSASVGDRVTITCRASQDINSYLSWFQQXPGKAPKTLIYRANRLESGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 Similarity
96; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RFSGSGSGTDYTLTISSLQYEDFGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/10/325,696 FILING DATE: 18-Dec-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.8%; Score 498; DB 15; 89.7%; Pred. No. 3.9e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 107;
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; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-436-782-33
                                                                                                                                       Query Match 88.4%; Score 496; DB 15; Best Local Similarity 86.0%; Pred. No. 5.7e-35; Matches 92; Conservative 10; Mismatches 5;
                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 48
SOFTWARE: PatentIn version 3.2
SEQ ID NO 33
61 RFSGSGSGODYSLTISSLEYEDMGIYYCLKYDEFPYTFGGGTKLEIK 107
                         61 RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                Length 107;
                                                                                                                                       Indels
                                                                                                                                       0;
                                                                                                                                   Gaps
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Search completed: December 29, 2004, 18:42:01 Job time: 62.8643 secs

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| 487       | 487       | 487       | 487       | 489       | 489       | 489       | 489       | 491       | 491       | 491       | 491       | 491       | 491       | 491       | 491       | 491       | 493       | 493       | 493       |
| 86.8      | 86.8      | 86.8      | 86.8      | 87.2      | 87.2      | 87.2      | 87.2      | 87.5      | 87.5      | 87.5      | 87.5      | 87.5      | 87.5      | 87.5      | 87.5      | 87.5      | 87.9      | 87.9      | 87.9      |
| 107       | 107       | 107       | 107       | 127       | 107       | 107       | 107       | 379       | 360       | 358       | 358       | 355       | 355       | 214       | 214       | 107       | 127       | 107       | 107       |
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| Humanised | Humanised | Humanised | Humanised | Blood flo | Blood flo | Humanised | Humanised | R. pipien | Mature hu | Mouse mon | Humanised | Blood flo | Humanised | Humanised |

## ALIGNMENTS

RESULT 1 AAW23953 AAW23953; AAW23953 standard; protein; 107 B

Chimeric humanised Mus musculus A717 antibody heavy chain. 17-OCT-2003 17-JUN-1998 (revised)
(first entry)

Chimeric; variable r region; diabetes; humanised; human; murine; A717; antibody; heavy chain; region; diabetes; prophylactic treatment.

Chimeric. Mus musculus. Homo sapiens.

WO9749429-A1

31-DEC-1997.

26-JUN-1997; 97WO-US011605

27-JUN-1996; 96US-00672176.

(EXOC-) EXOCELL

Cohen MP, Shearman 3

N-PSDB; WPI; 1998-076916/07. AAV04637

New humanised antibodies specific for glycated albumin - recombinant expression of humanised mouse antibodies, use treating diabetic vasculopathy. n - prepared useful for, e.g.

Example 2; Page 15; 27pp; English.

The sequence is that of a humanised variable region of the A717 antibody light chain VI-1. The antibody has specificity for glycated albumin (GA) and is capable of neutralising the effects of GA in vivo. It can be used in the manufacture of therapeutics useful for the prophylactic treatment of complications of diabetes (especially diabetic vasculopathy and retinopathy) and atherosclerotic cardiovascular disease. The genetically engineered antibodies are specific as they only interact with GA but not other proteins and may be easily prepared in pure form. (Updated on 17-OCT-2003 to standardise OS field)

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Matches Query Match

99;

Conservative

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Score 520; DB 2; Pred. No. 8.5e-33; 4; Mismatches 4

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Local Similarity

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                                                                                                                                                                                                                                      The sequence is that of a humanised variable region of the A717 antibody SCFV, huA717-ScFV. The antibody has specificity for glycated albumin (GA) and is capable of neutralising the effects of GA in vivo. It can be used of complications of therapeutics useful for the prophylactic treatment retinopathy and atherosclerotic cardiovascular disease. The genetically engineered antibodies are specific as they only interact with GA but not other proteins and may be easily prepared in pure form. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Page 15-16; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New humanised antibodies specific for glycated albumin - prepared recombinant expression of humanised mouse antibodies, useful for, treating diabetic vasculopathy.
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1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS 60
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(first entry)
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1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLYDGVPS

Best Loc Matches Query Match Best Local (

, 86 Similarity

Conservative

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91.6%;

Score 514; DB Pred. No. 2.5e-3; Mismatches

DB 6; .5e-32; 6

Length

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                          This invention describes a novel antibody that specifically binds mature human interlevkin (IL)-lbeta, and binds the same epitope on mature human interlevent of the invention have antibody Mu007 or humanized antibody Hu007. antiinflammatory, osteopathic, antiallergic, cerebroprotective, antiasthmatic, immunosuppressive and antibacterial activity and can be for treating rheumatoid arthritis or osteoarthritis, or for inhibiting treating edestruction in a subject. The antibody is also useful for graft versus host disease, Crohn's disease, or inflammatory bowel graft versus host disease, Crohn's disease, or inflammatory bowel disease. This sequence represents the humanised murine Mu007 light chain variable region described in the disclosure of the invention
      Sequence 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 70-71; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New IL-1beta antibodies, useful for treating allergy, septic or endotoxic shock, septicemia, stroke, asthma, graft versus host disease, Crohn's disease, or inflammatory bowel disease.
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N-PSDB; ABQ77443.
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14-AUG-2001; 2001US-0312278P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Murine; light chain; variable region; antibody; Crohn's disease; human interleukin (IL)-lbeta; antirheumatic; antiarthritic; humanised antiinflammatory; osteopathic; antiallergic; cerebroprotective; antiasthmatic; immunosuppressive; antibacterial; vaccine; Mu007; rheumatoid arthritis; osteoarthritis; cartilage destruction; septic shock; endotoxic shock; septicaemia; stroke; asthma; graft versus host disease; inflammatory bowel disease.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an analogue of humanized antibody Hu007 that specifically binds mature II-lbeta and comprises at least one amino acid substitution at positions 54, 55 or 56 of the heavy chain complementarity determining region 2 (CDR2). The analogue is useful for the manufacture of a medicament for treating rheumatoid arthritis or osteoarthritis or for inhibiting cartilage destruction. The present sequence represents an antibody Hu007 light chain variable region
           10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hu007; analogue; humanized antibody; complementarity determining region; cgene therapy; CDR; human.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New analog of humanized antibody Hu007 that specifically binds mature 1 beta, useful for the manufacture of a medicament for treating
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                                                                                 ABG74711 standard;
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                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                               variable region described in the disclosure of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 75-76; 98pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       shock, septicemia, stroke, asthma, graft disease, or inflammatory bowel disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New IL-1beta antibodies, useful for treating allergy, septic or endotoxic shock, septicemia, stroke, asthma, graft versus host disease, Crohn's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-248068/24.
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RESGSASGIDYTLTISSLOPEDEATYYCLQYDEFPYTEGQGTKLBIK
                                  RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK
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ilarity 91.6%;
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3; Mismatches 6;
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15-JAN-2004

(first entry)

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RESULT 7
AAR92082
ID AAR9
XX AAR9
AC AAR9
XY 16-C
DT 15-M
XX
DE Muri
XX
KW Huma
KW monc
KW 1igh
XX
Homc
OS Homc
OS Mus
OS Chin
XX
FH Key
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Best Local S
Matches 98
                                     Homo; sapiens.
                                                                                Humanised antibody; chimeric antibody; antibody engineering; monocional antibody; MAb 1308F; respiratory syncytial virus;
                          Chimeric.
                                                                           light
                                                                                                                            Murine
                                                                                                                                                     16-OCT-2003
15-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an analogue of humanized antibody Hu007 that specifically binds mature IL-1beta and comprises at least one amino acid substitution at positions 54, 55 or 56 of the heavy chain complementarity determining region 2 (CDR2). The analogue is useful for the manufacture of a medicament for treating rheumatoid archiritis or osteoarthritis or for inhibiting cartilage destruction. The present sequence represents an antibody Hu007 analogue light chain sequence
                                                                                                                                                                                                                 AAR92082 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New analog of humanized antibody Hu007 that specifically binds mature 1 beta, useful for the manufacture of a medicament for treating rheumatoid arthritis or osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 17; Page 13-14; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ACF57836.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-FEB-2002; 2002US-0361423P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-FEB-2003; 2003WO-US003117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; CDR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hu007; analogue; humanized antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003073982-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ELIL ) LILLY & CO ELI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hu007
                                                                          chain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003-731644/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lementarity
                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                       61
                                                                                                                            1308F VL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibody analogue light chain
                                                                                                                                                                                                                                                                                                                                                        μ
                                                                                                                                                                                                                                                                                                                                                                                l Similarity
98; Conserv
                                                                                                                                                                                                                                                                           RFSGSASGTDYTLTISSLQPEDFATYYCLQYDEFFYTFGQGTKLEIK 107
                                                                                                                                                                                                                                                                                                  RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                        DIQMTQSPSSLSASVGDRVTITCKASQDIDRYLSWFQQKPGKAPKSLIYRVKRLVDGVPS
                                                                                                                                                                                                                                                                                                                                         DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                 214 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Huang L,
                                                                      complementarity determining region;
                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                   (revised)
(first entry)
                                                                                                                        CDR-grafted K102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             determining
                                                                                                                                                                                                              protein; 107
                                                                                                                                                                                                                                                                                                                                                                                         91.6%;
91.6%;
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Pred. No. 4.8e-32;
3; Mismatches 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              region;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IL-1beta; interleukin-1 beta;
steopathic; antiarthritic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Witcher DR;
                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                    Length 214;
                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                  RSV;
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Location/Qualifiers

US2002102257-A1

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RESULT 8
ABG31429
ID ABG3
XX ABG3
XX ABG3
XX ABG3
XX Huma
XX Huma
XX Huma
KW Comp
KW vari
KW resp
KW resp
KW resp
XX KO
OS Mus
OS Mus
OS Synt
OS Chim
XX US20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                      Mus sp.
Synthetic.
                                                                                            Human-murine chimeric antibody; humanised antibody; CDR; complementarity determining region; variable heavy chain; VH; variable light chain; VL; monoclonal antibody; MAb; RSV infect respiratory syncytial virus infection; virucide; human; CDR-g: K102; anti-RSV F glycoprotein VL; mutant; mutein.
                                                                                                                                                                                                            29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A human-mouse chimeric antibody light chain has a human K102 framework contg. complementarity determining regions (CDRs) from the variable light (VL) chain of a murine monoclonal antibody (MAb 1308F) against respiratory syncytial virus (RSV) glycoprotein F antigenic site C. CDRs from MAb 1308 VL (AAR92083) were grafted into the human HV3 VL region (AAR92081) to produce CDR-grafted VL (AAR92082). A similar procedure was used to obtain CDR-grafted VL (AAR92089). The humanised antibody is used to treat RSV infection. (Updated on 16-OCT-2003 to standardise OS field)
                                                                   Homo sapiens
                                                                                                                                                                                  Humanised
                                                                                                                                                                                                                                                                 ABG31429 standard; protein; 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New chimeric antibodies against respiratory syncytial virus - comprise human antibodies with CDR's from the variable heavy and light chains of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Fig 2A-2B; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1996-139646/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Johnson LS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                    RFSGSGSGQDYTLTISSLQPEDFATYYCLQVDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                       DIOWTQSPSTLSASVGDRVTITCKASQDINRYLNWYQQKPGKAPKLLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                          DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                     RFSGSGSGTEFTLTISSLÓPDDFATYYCLÓFHEFPYTFGGGTKLEIK 107
                                                                                                                                                                               CDR-grafted
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                         (first entry)
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/label=
50. .56
/label=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           90.9%;
                                                                                                                                                                            anti-RSV F glycoprotein VL #1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDR2
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Pred. No. 5e-32;
8; Mismatches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                       infection;
CDR-grafted;
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RESULT 9
AAR57482
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a human-murine chimeric antibody comprising a human antibody containing at least one complementarity determining region (CDR) from each of the variable heavy (VH) and variable light (VH) chains of a non-human, preferably murine, monoclonal antibody (MAb) against respiratory syncytial virus (RSV). The humanised antibody is useful for preventing or treating a respiratory syncytial virus infection. The antibody can be injected which is preferable to prior art treatment methods involving intravenous transfusions. The present
                                                                                                                                                                                                      Humanized
                                                                                                                                                                                                                          25-MAR-2003
02-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New human-murine chimeric antibody useful for preventing or treating respiratory syncytial viral (RSV) infection, contains at least one complementarity determining region from a murine antibody.
04-AUG-1994
                                                                                                                                   Synthetic.
                                                                                                                                                       chimeric antibody; humanized ant VL; complementarity determining
                                                                                                                                                                  Monoclonal antibody; MAb; respiratory syncytial virus; RSV; chimeric antibody; humanized antibody; antibody engineering
                                                                                                                                                                                                                                                                                AAR57482 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example
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                      WO9417105-A1
                                                      Region
                                                                            Region
                                                                                                  Region
                                                                                                                                                                                                                                                            AAR57482;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (JOHN/) JOHNSON
                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                        61
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                                                                                                                                                                                                                                                                                                                                                                                                                                  95;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Fig 2; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             107
                                                                                                                                                                                                                                                                                                                                                    RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                   RFSGSGSGTEFTLTISSLQPDDFATYYCLQFHEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  represents a human-murine chimeric antibody
                                                                                                                                                                                                      1308F VL.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                          (revised)
(first entry)
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                                                                                                            location/Qualifiers
                                                                 label=
                                                                                     label= CDR1
                                                                                                                                                                                                                                                                                                                                                                                                                                          90.9%;
                                           CDR3
                                                                  CDR2
                                                                                                                                                                                                                                                                                  129
                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                               Score 510; DB 5
Pred. No. 5e-32;
8; Mismatches
                                                                                                                                                        region;
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                                                                                                                                                                                                                                                                                                                                                                                                                               4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 107;
                                                                                                                                                                   engineering;
                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                   light
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                   chain;
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RESULT 10
AAR92085
XAXGXGXGXGXGXGXGXGXGXGXGXGX
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                                                                                                                                                           Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic overlapping oligonucleotides and the 5' primer given in AAQ67197 and 3' primer of AAQ67198 were used to construct a DNA sequence (AAQ67194) encoding humanized 1308F VL (AAR57482) in which CDRs of the anti-RSV F antigen murine MAb 1308F VL region were substituted into the homologous human K102 gene. Similar procedures were used to obtain humanized 1308F VH for the construction of anti-RSV F protein humanized antibody. (Updated on 25-MAR-2003 to correct PN field.)
                                09-AUG-1995;
                                                                              WO9605229-A1
                                                                                                              Region
                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                  Humanised antibody; chimeric antibody; antibody engineering; monoclonal antibody; MAb 1308F; respiratory syncytial virus; light chain; complementarity determining region; CDR.
                                                                                                                                                                                                                                                                                        15-MAY-1996
                                                                                                                                                                                                                                                                                                               AAR92085;
                                                                                                                                                                                                                                                                                                                                   AAR92085 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 4A-4B; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human-murine chimeric antibodies against respiratory syncytial virus comprises at least 1 CDR from each variable heavy and light chain of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1994-264037/32.
N-PSDB; AAQ67194.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JAN-1993;
          15-AUG-1994;
                                                       22-FEB-1996.
                                                                                                                                     Region
                                                                                                                                                                                                                                                                  Humanised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Johnson
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                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                   61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            murine monoclonal antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                                         RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                          DIQMTQSPSTLSASVGDRVTITCKASQDINRYLNWYQQKPGKAPKLLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                             RESGSGSGTEFTLTISSLQPDDFATYYCLQFHEFPYTFGGGTKLEIK
                                                                                                                                                                                                                                                                 antibody 1308 VL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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A
                                                                                                                                                                                                                                                                                        (first
          94US-00290592
                                 95WO-US010053
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                                                                                                                                                                      Location/Qualifiers
                                                                                                                                    /label= CDR1
72. .78
                                                                                                                          label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INC
                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90.9%;
                                                                                                     CDR3
                                                                                                                          CDR2
                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 510; DB 2
Pred. No. 6e-32;
8; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                              129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                  RSV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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ABG31444
ID ABG
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Best Local S
Matches 95
                                                                                                                                                                                                            Mus sp.
Synthetic.
                      WPI; 2002-673988/72.
                                                                                                21-SEP-1998;
                                                                                                                       21-SEP-1998;
                                                                                                                                                                                                                                                                Human-murine chimeric antibody; humanised antibody; CDR; complementarity determining region; variable heavy chain; VH; variable light chain; VL; monoclonal antibody; MAb; RSV infection; respiratory syncytial virus infection; virucide; Hul308VL; mutant;
                                                                      (JOHN/) JOHNSON
                                                                                                                                                01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A human-mouse chimeric antibody light chain has a human HV3 framework contg. complementarity determining regions (CDRs) from the variable light (VL) chain of murine monoclonal antibody (WAb) 1308F active against respiratory syncytial virus (RSV) glycoprotein F antigenic site C. DNA (AAT16181) coding for CDR-grafted VL-encoding region, Hul308 VL (AAR92085), was synthesized using overlapping oligonucleotides. The construct was used with Hul308 VH (see AAR92084) for prodn. in COS-1 transfectants of humanised antibody useful for treatment of RSV infection
                                                                                                                                                                                                Chimeric.
                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                            mutein.
                                                                                                                                                                       JS2002102257-A1.
                                                                                                                                                                                                                                                                                                                                     Amino
                                                                                                                                                                                                                                                                                                                                                            29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                           ABG31444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 129 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New chimeric antibodies against respiratory syncytial virus - comprise human antibodies with CDR's from the variable heavy and light chains of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Fig 4A-4B; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   murine antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MEDI-)
                                                                                                                                                                                                                                                                                                                               acid sequence for humanised antibody Hu1308VL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1996-139646/14.
DB; AAT16181.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
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                                                                                                                                                                                                                                                                                                                                                                                                         standard; protein; 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RFSGSGSGTEFTLTISSLQPDDFATYYCLQFHEFPYTFGGGTKLEIK 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DIQMTQSPSTLSASVGDRVTITCKASQDINRYLNWYQQKPGKAPKLLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                             98US-00158120
                                                                                                                      98US-00158120
                                                                       r
                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 510; DB 2
Pred. No. 6e-32;
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New human-murine chimeric antibody useful

for preventing

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treating

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RESULT 12
AAW58478
ID AAW58
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Matches
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                                                                                                                                                                                                   13-DEC-1991;
14-DEC-1992;
23-JUN-1993;
A method has been developed of depleting CD5+ cells in an animal method comprises administering a cytotoxic protein containing a moviment of the protein is an anti-
                                                                              Depletion of CD5-positive cells in vivo humanised variable regions.
                                                       Claim 1; Col 63-64; 77pp;
                                                                                                                         WPI; 1998-376744/32
                                                                                                                                                  Studnicka
                                                                                                                                                                                                                                                         07-JUN-1995;
                                                                                                                                                                                                                                                                                 23-JUN-1998.
                                                                                                                                                                                                                                                                                                        US5770196-A.
                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                               Humanised; human; mouse; CD5; anti-CD5 antibody; immunoglobulin; depletion; cytotoxic; immunoconjugate; fusion protein; psoriasis autoimmune disease; rheumatoid arthritis; type I diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a human-murine chimeric antibody comprising a human antibody containing at least one complementarity determining region (CDR) from each of the variable heavy (VH) and variable light (VH) chains of a non-human, preferably murine, monoclonal antibody (MAb) against respiratory syncytial virus (RSV). The humanised antibody is useful for preventing or treating a respiratory syncytial virus infection. The antibody is also useful for diagnosing RSV infection. The antibody can be injected which is preferable to prior art treatment methods involving intravenous transfusions. The present sequence represents a human-murine chimeric antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                       Humanised
                                                                                                                                                                            AMOX ( AMOX)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW58478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW58478 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                respiratory syncytial viral complementarity determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                 sp.
o sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Fig 4; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDBFFYTFGGGTKVEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DIQMTQSPSTLSASVGDRVTITCKASQDINRYLMWYQQKPGKAPKLLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129
                                                                                                                                                  3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RFSGSGSGTEFTLTISSLOPDDPATYYCLOFHEPPYTFGGGTKLEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                     anti-CD5
                                                                                                                                                                            CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                                                                                                                                   91US-00808464.
92WO-US010906.
93US-00082842.
                                                                                                                                                                                                                                                       95US-00472788
                                                                                                                                                                                                                                                                                                                                                                                                                                   immunoglobulin H65 light chain variable region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein; 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.9%;
                                                       English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 510; DB 5
Pred. No. 6e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              infection,
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                                                                                            - using
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4
                                                                                            anti-CD5 antibodies with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 129;
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                                                                                                                                                                                                                                                                                                                                                                                              psoriasis;
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 y a modified anti-CD5 Ig
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                            The
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RESULT 13
ADIO1168
ID ADIO1
AC ADIO1
XX ADIO1
XX
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Best Local Similarity
                                                                                                                                                                                                                            13-DEC-1991;
14-DEC-1992;
23-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    molecule or an immunoconjugate or fusion protein containing an anti-CD5 Ig molecule, and where the modified Ig variable domain comprises at least one of (a) a modified light chain variable region (see AAW58478 or AAW58480), and (b) a modified heavy chain variable region (see AAW58479 or AAW58481), where AAW58478 and AAW58479 are humanised forms of the H65 light and heavy chain variable domains with low risk amino acid substitutions [i.e. low risk of reducing antigen-binding specificity.] and AAW58480 and AAW58481 are humanised forms of the H65 light and heavy chain variable domains with moderate risk amino acid substitutions and are present in humanised H65 antibody he3 (ATCC HB 11206). The method is useful for treating autoimmune diseases, especially systemic lupus erythematosus, rheumatoid arthritis, psoriasis or type I diabetes. The present sequence represents a specifically claimed humanised anti-CD5 immune-libration chain variable.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pemphigus vulgaris; diabetes mellitus type 1;
progressive systemic sclerosis; aplastic canemia; myasthenia gravis;
myositis; polymyositis; dermatomyositis; 5jogren's disease;
collagen vascular; polyarteritis; inflammatory bowel; Crohn's;
ulcerative colitis; multiple sclerosis; psoriasis;
primary billary cirrhosis; T cell; tissue transplant rejection;
graft versus host disease; viral; fungal infection; murine; mouse;
monoclonal antibody; H65; humanised light chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antidiabetic; antithyroid; antipsoriatic; antirheumatic; antiarthritic; neuroprotective; antiulcer; antianaemic; fungicide; virucide; autoimmune; systemic lupus erythematosus; lupus nephritis; scleroderma; morphea; lichen planus; rheumatoid arthritis; spondylarthritis; thyroiditis;
   WPI; 2004-042226/04
                                                                   Studnicka GM
                                                                                                                                                                                                                                                                                                                                                              10-JAN-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003229207-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              variable domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Murine monoclonal antibody H65 humanised light chain VL protein 1.
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                                                                                                                                 AMOX
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                                                                                                                                                                                                                                                                                                                                                              2003US-00340189
                                                                                                                                    TECHNOLOGY LTD
                                                                                                                                                                                              91US-00808464.
92WO-US010906.
93US-00082842.
99US-00245202.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89.5%;
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Pred. No. 2.1e-31;
6; Mismatches 6
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commain comprising an amino acid sequence modified at low risk positions couch that each amino acid residue in a low risk position in the light or cheavy chain variable region sequence of the domain is same as the amino could residue at the corresponding position of a selected antibody light or corresponding position of a selected antibody light corresponding sequence or consensus sequence. The polypeptide of the invention demonstrates immunosuppressive, dermatological, antitheumatory, antidiabetic, antithyroid, antipsoriatic, antitheumatory, antidiabetic, antithyroid, antipsoriatic, fungicide and virucide activities. The polypeptide may be useful for treating autoimmune diseases including systemic lugus continued to the polymental partities and sepondylarthritis, thyroiditis, thyroiditis, corresponding to the polymental partities and spondylarthritis, thyroiditis, corresponding to the polymental partities and primary bowel disease including Crohn's corresponding to the partities and primary corresponding to the partities and primary corresponding to the partities and 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel protein containing modified variable domain comprising amino acid sequence modified at low risk positions in heavy or light chain amino acid residue at corresponding position of native antibody sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention relates to a novel protein containing a modified variable ain comprising an amino acid sequence modified at low risk positions
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S
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                                                                            Query Match
Best Local S
Matches 95
61
                   61
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                                                           μ
                                                                              95,
                                                                                       Similarity
                RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFFYTFGGGTKVBIK 107
                                     DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
RESGSGSGTDYTLTISSLQYEDEGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                              Conservative
                                                                                      89.5%;
                                                                            9
                                                                                      Score 502; DB 8;
Pred. No. 2.1e-31;
                                                                              Mismatches
                                                                            6.
                                                                                                Length 107;
                                                                              Indels
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                                                                            Gaps
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Sequence 107 AA;

antibody variable

domain protein of the invention.

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RESULT 14
                                                                                                                        Human tissue factor; TF; humanised; antibody; mouse monoclonal antibody; ATR-2; ATR-3; ATR-4; ATR-5; ATR-7; ATR-8; thrombotic disease; DIC;
                                                                                                                                                Humanised ATR-5 L chain V region version "b1" protein sequence
                                                                                                                                                                 26-JAN-2000
                                                                                                                                                                                  AAY52724;
                                                                                                                                                                                                  AAY52724 standard; protein;
                                                                                                                                                                 (first entry
                                                                                                                                                                                                  107
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Synthetic.
Homo sapiens
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WO9951743-A1

disseminated

intravascular coagulation; immunogenicity; chimeric

02-APR-1999; 14-OCT-1999. 99WO-JP001768.

98JP-00091850

(CHUS ) CHUGAI SEIYAKU KK.

for

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AAB74985
ID AAB7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC The present invention describes chimeric antibody (Ab) heavy (H) chains CC containing the variable region of the H chain of a mouse monoclonal Ab CC recognising human tissue factor (hTP) and the constant region of the H CC chain of a human Ab. The variable region is one of six specified CC Ab's ATR-2,3,4,5,7 or 8). Also described are chimeric Ab light (L) chains CC containing the variable region of the L chain of a mouse monoclonal Ab CC recognising human tissue factor (hTP) and the constant region of the L chain of a mouse monoclonal Ab CC chain of a human Ab, the variable region being one of six specified consequences (which are the L chain variable regions from mouse monoclonal Ab Ab S ATR-2,3,4,5,7 or 8). The chimeric Ab's can be used for the treatment and prevention of thrombotic disease, especially of disseminated intravascular coagulation (DIC). The humanised antibody has the high hTP CD inding activity of the mouse monoclonal antibody but greatly reduced communogenicity. AAZ33001 to AAZ33091 and Y527007 to AAY52767 represent are constant invention.
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01-OCT-1999;
01-OCT-1999;
01-OCT-1999;
01-OCT-1999;
01-OCT-1999;
01-OCT-1999;
                                                                                                                                                                                                                                                       Mouse; human; humanised; monoclonal antibody; tissue factor; TF; prevention; blood coagulation; tumour; ATR-5; anticoagulant; thromboytic; infection; venous thrombosis; arterial thrombosis; vascular medial thickening; accelerated blood coagulation; thrombosis; blood vessel thickening.
                                                                                                                                                                                                                                                                                                                                                                                     16-JUL-2001 (first entry)
                                                                                                               29-SEP-2000;
                                                                                                                                               12-APR-2001.
                                                                                                                                                                             WO200124626-A1
                                                                                                                                                                                                                                                                                                                                                      Humanised ATR-5 L chain V region version
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB74985 standard; protein; 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 107 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 18; Page 259; 291pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Humanised antibody recognizing human tissue factor, used for treatment of disseminated intravascular coagulation.
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99JP-00281843.
99JP-00282120.
99JP-00282134.
99JP-00282167.
99JP-00282188.
99JP-00282192.
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 Mismatches

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Pred. No. 3.5e-31;
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Search completed: December 29,

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                                                                                                                                                        Query Match
Best Local S
Matches 96
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Saito H, Kitazawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CHUS ) CHUGAI SEIYAKU
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                                                                                                                                                                            Similarity
                        RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDEFPYTFGGGTKVEIK 107
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                                                                         DIQMTQSPSSLSASVGDRVTITCKASQDIKSFLSWFQQKFGKSFKTLIYYATSLADGVPS
RFSGSGSGTDYTLTISSLQPEDFATYYCLQHGESPYTFGGGTKVEIK 107
                                                                                                                                                          Conservative
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Maximum Match 100%
Listing first 45 summaries
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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| 88.1%; Score 494; DB 2; Length 214; imilarity 86.0%; Pred. No. 3.5e-43; Conservative 9; Mismatches 6; Indels 0; Gaps DIOMTOSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAPKTLIYRANRLVDGVPS    :    :  | GenBank/DDBJ d actor activity ranscription, -1. Ba205FDE995E2A   | ed) ed) sequence upda annotation up nt). riata; Verteb urognathi; Mu   | KV1C_HUMAN KV1X_HUMAN KV1X_HUMAN Q9UL79 Q7UZ473 KV1W_HUMAN KV1X_HUMAN Q6PIT5 AAH29444 Q9UL81 Q96P6 Q6FIH4 AAH34146 KV5T_MOUSE ALIGNMENTS   |
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InterPro; IPR003597; Ig_c1.
InterPro; IPR003596; Ig_MHC.
InterPro; IPR003596; Ig_MHC.
InterPro; IPR003596; Ig_W.
Pfam; PF07654; C1-set; 1.
Pfam; PF00047; ig; 1.
Pfam; PF00047; ig; 1.
SWART; SW00406; IGY 1.
PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS00290; IG_MHC; UNKNOWN 1.
SEQUENCE 236 AA; 26454 MW; 2C5865BF5EA10F4C CRC64;
                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way endified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P01637;
21-JUL-1986
                                                            or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                               Nature 287:603-607(1980).
                                                                                                                                                                                                                                                                                              Altenburger W., Steinmetz M., Zachau H.G.; "Functional and non-functional joining in immunoglobulin light chain
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=81052342; PubMed=6776411;
                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus NCBI_TaxID=10090;
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Mus musculus (Mouse).
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01-OCT-2003
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01-MAR-2004 (TEMBLrel. 25, Last sequence update)
Anti-colorectal carcinoma light chain.
Mus musculus (Mouse).
Bukaryota; Maranas
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15-JUL-1999
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MEDLINE=93383497; PubMed=8372513;
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8; Mismatches 6
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-!- MISCELLANEOUS: This is a Bence-Jones pr
PDB; 1WTL; X-ray; A/B=1-108.
GO; GO:0005576; C:extracellular; NAS.
GO; GO:0003823; F:antigen binding; NAS.
GO; GO:0006955; P:immune response; NAS.
InterPro; IPR007110; Ig-like.
InterPro; IPR007110; Ig-like.
SMART; SM00406; IGv; 1.

SMART; SM00406; IGv; 1.
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     PROSITE; PS50835; 3D-structure; Ben
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MEDLINE=81267384; PubMed=6167731;
Stevens F.J., Westholm F.A., Pana
                                                                                                                           "Characterization and preliminary related fragment of the human kI I
                                                                                                                                                                                                                                MEDLINE=95086080; PubMed=7993911;
Huang D.-B., Chang C.-H., Ainsworth C.,
Solomon A., Stevens F.J., Schiffer M.;
"Comparison of crystal structures of two
                                                                                                                                                                                                              structural origin of altered light-chain dimers.";
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Mammalia; Eutheria; Primates;
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS50835; IG LIKE; 1.
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                                                                                                                                                                                                                                                                         SEQUENCE, AND X-RAY CRYSTALLOGRAPHY
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InterPro; IPR003596;
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KEDLINE-22386257; PubMed=12477932;

KEDLINE-22386257; PubMed=12477932;

KA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jordan H., Moore T., Max S.I., Mang J., Hsieh F.,

A Altschenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J.T., Scheetz T.E.,

A Bounstein M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

A Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

A Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
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Complementarity-determining-2.
Framework-3.
Complementarity-determining-3.
Framework-4.
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RC TISSUB=Primary B.Cells;

RX MEDILINE=22388257; PubMed=12477932;

RX MEDILINE=22388257; PubMed=12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Klausner R.D., Collins F.S., Wagner T., Max S.I., Wang J., Hsieh F.,

RA Klausner R.D., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

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RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Rax S.I., Wang J., Hsieh F.,

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RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schmerch A., Schein J.E.,

RG Generstion and intiisla analysis of more than 15 000 fullllength human

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InterPro; IPR003597; Ig_cl.
InterPro; IPR003597; Ig_MRC.
InterPro; IPR003596; Ig_W.
Pfam; PF07554; C1-set; I.
Pfam; PF07047; Ig; I.
SMART; SM00406; IGv; I.
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Mammalia; Eutheria;
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SEQUENCE 236 AA; 25702 N
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Primates;
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79.4%;
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           analysis
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Last sequence update)
Last annotation update)
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Pred. No. 3
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Biophys. Struct. Mech. 1:139-146(1975).
-1- MISCELLANEOUS: The structure of the V region of the kappa chain REI.
-1- MISCELLANEOUS: The C region of this chair MISCELLANEOUS: This is a Bence-Jones property of the structure.
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Best Local S
Matches 85
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PDB; 1JV5; X-ray; A=1-107.

GO; GO:0005576; C:extracellular; NAS.
GO; GO:0003823; F:antigen binding; N
                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY.
MEDLINE=77022433; PubMed=123
Fehlhammer H., Schiffer M.,
Schwager P., Steigemann W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KV1B HUMAN
P01594;
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Pfam; PF00047; 19; 2.
SMART; SM00409; IG; 2.
SMART; SM00407; IGC1; 1.
SMART; SM00406; IGV; 1.
                                                                                                                                                                                                                                                                                                    Schiechl H., Hilstonmann N.;

"Rule of antibody structure. The primary structure immunoglobulin L-chain of the kappa-type, subgroup protein Au).";
                                                                                                                                                                                                                                                                               Hoppe-Seyler's Z. Physiol.
                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                          MEDLINE=72189444; PubMed=5028201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE.
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PROSITE; P800290; IG_MHC; UNKNOWN_1.
Hypothetical protein.
SEQUENCE 236 AA; 25707 MW; 4FC8E
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l. Acad. Sci. U.S.A.
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                                                                                                                                                                              ; PubMed=1234024;
Chiffer M., Epp O., C
igemann W., Schramm F
etermination of the v
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79.4%;
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Pred. No. 5e-38;
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n H.J.;
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Q7TMK3
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Best Local S
Matches 85
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Q7TMK3;
01-OCT-2003 (TrEMBLrel. 2
01-OCT-2003 (TrEMBLrel. 2
01-MAR-2004 (TrEMBLrel. 2
                                                                                                                                                                                                                   Hypothetical protein.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chc
Mammalia; Eutheria; Roc
SEQUENCE FROM N.A.

STRAIN=CZECH II;

TISSUE-Mammary tumor metastatized to lung. Tumor arose spontanec

MEDLINE=22388257; PubMed=12477932;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.

Hopkins R.F., Jordan H., Moore T., Max S.L., Wang J., Heisch F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
                                                                                                                                                                                                       NCBI_TaxID=10090;
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SMART; SM00406; IGV;
PROSITE; PS50835; IG
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DOMAIN
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Bence-Jones protein;
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Rodentia;
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79.4%;
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Pred. No. 2.5e
7; Mismatches
                                                                                                                                                                                                             Sciurognathi; Muridae;
                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi
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Framework-3.
Complementarity-determining-3.
Framework-4.
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Best Local S
Matches 84
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InterPro; IPR007110; Ig-like.
InterPro; IPR003597; Ig_cl.
InterPro; IPR003597; Ig_wHC.
InterPro; IPR003596; Ig_v.
Pfam; PF07654; Cl-set; I.
Pfam; PF007654; Cl-set; I.
SMART; SM00406; IGv; 1.
SMART; SM00406; IG LIKE; 2.
PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS50839; IG_MHC; UNKNOWN_1.
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13-AUG-1987 (Rel. 05,
05-JUL-2004 (Rel. 44,
1g kappa chain V-I re
Homo sapiens (Human).
Eukaryota, Metazoa, C
Mammalia, Eutheria; P
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                                                                                                                                                                                                                                                                                      KV1V HUMAN
P04430;
                                                                                                                                SEQUENCE.
MEDLINE=86174817; PubMed=3083240;
Dwulet F.B., O'Connor T.P., Benso
                                                                                                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                               HUMAN
                                                                                                          Dwulet F.E., O'Connor T.P., Benson M.D.
"Polymorphism in a kappa I primary (AL)
Mol. Immunol. 23:73-78(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical SEQUENCE 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strausberg R.;
Submitted (AUG-2003) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jones S.J., Marra M.A.; "Generation and initial analysis and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Mammary tumor
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Primates;
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Pred. No. 6.3e
11; Mismatches
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on update)
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InterPro; IPR003596; Ig_v.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PR0SITE; PS50835; IG_LIKE; 1.
Bence-Jones protein; Direct pro
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PROSITE;
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(In) Franck F., Shugar D. (eds.)
                                                                                                                                                                                                                                                                                                               York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE.
MEDLINE=68362076; PubMed=5595110;
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-!- MISCELLANEOUS: This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hilschmann
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Mammalia; Eutheria; Primates;
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GO:0003823; F:antigen binding;
GO:0006955; P:immune response;
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Pramework-1.
Complementarity-determining-1.
Pramework-2.
Complementarity-determining-2.
Pramework-3.
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Pred. No. 3
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Complementarity-determining-3.
Framework-4.
By similarity.
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Complementarity-determining-1.
Framework-2.
Complementarity-determining-2.
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21-JUL-1986
15-JUL-1999
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PIR; A01927: VANCO (
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InterPro; IPR003596; Ig_v.
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21-UUL-1986 (Rel. 01, Last sequence update)
15-UUL-1999 (Rel. 38, Last annotation update)
Ig kappa chain V-V region L6 precursor (Fragm
Mus musculus (Mouse)
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"Differences between germ-line and rear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
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RT; SM00406; IGv; 1.
SITE; PS50835; IG LIKE; 1.
www.moodlobulin V region; Signal.
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                                                                                                                                                                               Similarity
                                  RESGSGSGODYTLTISSLOPEDFATYYCLOYDEFP
                                                                                         DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAPKTLIYRANRLVDGVPS
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RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFP
                                                                 DÍKMTQSÞSSMYÁSLGERVTÍTCKÁSQDÍNSYLSWFQQKÞGKSÞKTLIYRANRLVDGVÞS
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77.6%;
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                                                                                                                                                        7;
                                                                                                                                                    Score 442; DB 1;
Pred. No. 4.4e-38;
7; Mismatches 5
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Framework-
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Pred. No. 4.1e-38;
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By similarity.
                                                                                                                                                                                                                             BA852C58F328E1C3 CRC64;
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mechanism.";
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RESULT 12 KV1R\_HUMAN

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Best Local S
Matches 84
                                                                P01607;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
7- ranna chain V-I region Rei.
                                       Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
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NON TER
SEQUENCE
MEDLINE=76023758; PubMed=809329; Palm W., Hilschmann N.;
                                                                                                                                              KV10
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                      SEQUENCE.
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GO; GO:0005576; C:extracellular; NAS. GO; GO:0003823; F:antigen binding; NAS. GO; GO:0006955; P:immune response; NAS
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P01610;
21-JUL-1986
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HSSP; P80362; 1WTL.
GO; GO:0005576; C:ext
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InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Monoclonal antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Amino acid sequence of the Fv region of a human monoclonal IgM (protein WEA) with antibody activity against 3,4-pyruvylated galactose in Klebsiella polysaccharides K30 and K33.";

Proc. Natl. Acad. Sci. U.S.A. 80:4837-4841(1983).

1- MISCELLANEOUS: This chain was obtained from a monoclonal antibody against 3,4-pyruvylated galactose and isolated from a patient with Maldenstrom's macroglobulinemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=83273707; PubMed=6410398;
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Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Joni F., Frangione B., "Amino acid sequence of the (protein WEA) with antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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                                                                                                                                                                                                                                         DIQMTQSPSSLSASVGDRVTITCRASQGIRNDLTWYQQKPGTAPKRLIYGATSLQSGVPS
                                                                                                                                                                                                                                                          DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKDGKAPKTLIYRANRLVDGVPS
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                                                  Chordata; Craniata; Vertebrata; Primates; Catarrhini; Hominidae;
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78.5%;
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Pred. No. 5.2e-38;
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Complementarity-determining-3.

Framework-4.

By similarity.
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Complementarity-determining-1.
Framework-2.
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                                                                                                                                                                                                                                                                                                                                     9249B61F0945618C CRC64;
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PDB; 1AR2; X-ray; @
PDB; 1BWW; X-ray; P
PDB; 1REI; X-ray; P
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE;
3D-structure; Bence-Jones F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Epp O., Lattman E.E., Schiffer M., Huber R., Palm W.; "The molecular structure of a dimer composed of the variable portions of the Bence-Jones protein REI refined at 2.0-A resolution."; Biochemistry 14:4943-4952(1975).
                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "The primary structure of a crystalline monoclonal immunoglobulin kappa-type L-chain, subgroup I (Bence-Jones protein Rei); isolatic and characterization of the tryptic peptides; the complete amino a sequence of the protein; a contribution to the elucidation of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN

    I- MISCELLANEOUS: This is a Bence-Jones protein.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO:0005576; C:extracellular; NAS. GO:0003823; F:antigen binding; NAS. GO:0006955; P:immune response; NAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MISCELLANEOUS:
 61
                                61
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                                                                                                                                                        Similarity
                                RFSGSGSGQDYTLTISSLQPEDFATYYCLQYDBFPYTFGGGTKVEI 106
                                                                                      DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
                                                                                                                                      Conservative
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A/B=1-107.
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79.2%;
SSLQPEDIATYYCQQYQSLPYTFGQGTKLQI
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                                                                                                                                  Score 439; DB 1; I
Pred. No. 8.4e-38;
6; Mismatches 16;
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A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Richards S.; Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Villalon D.K., Muzny D.M., Sodergren B.J., English R.A.,

Villalon D.K., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Whitling M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Jones S.J., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length human

"Generation and initial analysis of more than 15,000 full-length human
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InterPro; IPR003599; Ig.

InterPro; IPR007110; Ig-like.

InterPro; IPR003597; Ig_c1.

InterPro; IPR003596; Ig_wt.

TherPro; IPR003596; Ig_v.
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Pfam; PF00047; 19; 2.
SMART; SM00409; IG; 2.
SMART; SM00407; IGC1; 1.
SMART; SM00406; IGV; 1.
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Q6GMX9;
05-JUL-2004
05-JUL-2004
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PROSITE; PS00290; IG MHC; UNKNOWN_1.
Hypothetical protein.
SEQUENCE 236 AA; 25924 MW; FDE20
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MEDLINE=22388257; PubMe
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RESULT Q96SA9

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WA MEDLINE=98375893; PubMed=9712075;

A Adderson E.E., Shikhman A.R., Ward K.E., Cunningham M.W.;

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If molecular analysis of polyreactive monoclonal antibodies from the poly of polyses.

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Q96SA9;
Q1-DEC-2001 (TrEMBLrel. 19, Created)
Q1-DEC-2001 (TrEMBLrel. 26, Last sequence update)
Q1-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Anti-streptococcal/anti-myosin immunoglobulin kappa light chain variable region (Fragment).
Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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107 AA;
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|            | 5                  | 44                 | ü                  | 42                 | 41                 | 6                  | 39                 | 8                  | 37                 | 36                 | 35                 | 34                 | 33                 | 32                 | 31                 | 30                 |
|------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|            | 431                | 431                | 432.5              | 432.5              | 432.5              | 433.5              | 433.5              | 433.5              | 434.5              | 434.5              | 435                | 435                | 435                | 435.5              | 435.5              | 436                |
|            | 67.1               | 67.1               | 67.4               | 67.4               | 67.4               | 67.5               | 67.5               | 67.5               | 67.7               | 67.7               | 67.8               | 67.8               | 67.8               | 67.8               | 67.8               | 67.9               |
|            | 160                | 127                | 171                | 128                | 126                | 287                | 139                | 136                | 122                | 116                | 129                | 129                | 127                | 132                | 131                | 627                |
|            | N                  | N                  | N                  | ν                  | N                  | 4                  | -                  | N                  |                    | N                  |                    |                    | N                  | N                  | N                  | 2                  |
| ALIGNMENTS | PL0105             | S34014             | S23623             | A37267             | B33548             | PC4402             | MHMS18             | S31600             | PH0958             | 853751             | A33548             | S36260             | PH0955             | PH0954             | 866537             | S14683             |
| ENTS       | anti-PR2 erythrocy | Ig heavy chain V r | Ig heavy chain V r | Ig heavy chain V r | Ig heavy chain V-1 | pelB leader/Ig hea | Ig heavy chain pre | Ig heavy chain V r | Ig heavy chain V r | antibody Fab Jel 1 | Ig heavy chain V-1 | Ig heavy chain V r | Ig mu chain precur |

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H32513

If heavy chain precursor V region (BXW16) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-May-1990 #sequence_revision 31-Dec-1990 #text_change 21-Jan-2000
C;Accession: H32513
R;Kofler, R.; Strohal, R.; Balderas, R.S.; Johnson, M.B.; Noonan, D.J.; Duchosal, M.A.
J. Clin. Invest. 82, 852-860, 1988
A;Title: Immunoglobulin kappa light chain variable region gene complex organization an A;Reference number: A94689; MUID:88331394; PMID:3138286
A;Accession: H32513
                                                                                                                                                                                                                                                                                                                                                                                                                A;Title: Human anti-self antibodies with high specificity from phage display librarie, A;Reference number: $36256; MUID:93178448; PMID:7679990 A;Accession: $36265 A;Status: preliminary; nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-118 <GRI>A;Residues: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Accession: S36265
R;Griffiths, A.D.; Malmqvist, M.; Marks, J.D.; Bye, J.M.; Embleton, M.J.; McCafferty, EMBO J. 12, 725-734, 1993
                                                                                                                                                                                      A;Cross-references: EMBL:218846; NID:g33121; PIDN:CAA79298.1; PID:g939900 C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;15-98/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ig heavy chain V region (clone alpha-MUC1-1) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 23-Jul-1999
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A;Residues: 1-137 <KOF>
A;Residues: 1-137 <KOF>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
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Query Match
Best Local Similarity
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73.9%; Pred. No. 8.3e-35;
tive 14; Mismatches 16
                        Score 459.5; DB 2;
Pred. No. 3.7e-34;
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R;Martin, T.; Duffy, S.F.; Carson, D.A.; Kipps, T.J.
J. Sxp. Med. 175, 983-991, 1992
A;Title: Evidence for somatic selection of natural autoantibodies.
A;Reference number: PH0952; MUID:92202880; PMID:1552291
A;Accession: PH0952
A;Status: nucleic acid sequence not shown
A;Residues: 1-128 <MAR>
                                                                                                                                                                                                                                                                                                                        Ig heavy chain V region (G6+ CLL-SWI) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 16-Aug-1996
                                        Query Match
Best Local :
                           Matches
                                                                                                                                                  Superfamily: immunoglobulin V region; immunoglobulin homology; Reywords: heterotetramer; immunoglobulin immunoglobulin; 1-30/Region: framework 1
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                                                                                 99-116/Region:
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A;Residues: 1-119 <BIL>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
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J. Immunol. 141, 1745-1753, 1988
A;Title: V region sequences of anti-DNA and anti-RNA autoantibodies
A;Reference number: A30502; MUID:88315787; PMID:2457627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ig heavy chain V region (A52) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 03-Nov-1988 #sequence_revision 03-Nov-1988 #text_change 21-Jan-2000
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                                   Local
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                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           VS 119
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                                                                                        complementarity-determining 2
framework 3
                                                                                                                             complementarity-determining 1
                                                                                                                                            immunoglobulin homology <IMM>
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                                                                                                                        framework 2
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                   Conservative
                                                                    complementarity-determining 3
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         71.3%; Score 457.5; 68.0%; Pred. No. 6e-
tive 15; Mismatcher
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72.1%;
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Pred. No. 3.7e-34;
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           Mismatches
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   6e-34;
17;
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      Indels
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A;Cross-references: GB:M26463
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;25-108/Domain: immunoglobulin homology <IMM>
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A;Title: Rapid cloning of rearranged immunoglobulin genes from human hybridoma cells us1
A;Accession: A32483; MUID:89273586; PMID:2499327
                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-142 < LAR>
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C:Pate: 12-Oct-1989 #sequence_revision 12-Oct-1989 #text_change 16-Aug-1996
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Best Local Similarity
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A; Residues: 1-150 < KAL)
A; Cross-references: GB:L02346
C; Superfamily: immunoglobulin V region; immunoglobulin C; Keywords: heterotetramer; immunoglobulin
F; 1-19/Domain: signal sequence #status predicted <SIG>F; 20-150/Product: Ig heavy chain V region #status predicted region < VRG>F; 20-117/Domain: variable region < VRG</p>
                                                                                                                                                                                   Matches
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Gene 122, 321-328, 1992
A;Title: A general method for chimerization of monoclonal antibodies by inverse polymer
A;Reference number: PN0444; MUID:93138402; PMID:1339379
A;Accession: PN0444
A;Accession: PN0444
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 AQKFQGRVTITADKSTSTAYMELSSLRSEDTAVYYCARGGNYDYIWGSYRGNDAFDIWGQ 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           V region - human (fragment) o sapiens (man)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNWYWVRQAPGKGLEWIGYIDPYYGDPGY 60
|||| || |||- ||| |||||| ||| ||- ||| ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||- ||
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                                                                                                                                           70.1%; Score 450; DB 69.3%; Pred. No. 3.1e Conservative 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTLVTVSS 119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71.1%;
74.8%;
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Pred. No. 8.7e-34;
8; Mismatches 21
                                                                                                                                                                               DB 2;
.1e-33;
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                                                                                                                                                                                                          Length 142;
                                                                                                                                   Indels
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A; Molecule type: mRNA
A; Residues: 1-128 < RUF>
C; Superfamily: immunoglot
C; Keywords: heterotetrame
F; 19-102/Domain: immunogl
                                                                                                                                                                           R;Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences A;Reference number: A38740; MUID:91177923; PMID:1706720
A;Accession: I37267
A;Status: preliminary; not compared with conceptual trans
                                                                                                                                                                                                                                                                                                 Ig heavy chain V region (129) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change 16-Aug-1996
C;Accession: 137267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Exp. Med. 175, 983-991, 1992
A;Title: Evidence for somatic selection of natural autoantibodies.
A;Reference number: PH0952; MUID:92202880; PMID:1552291
A;Accession: PH0962
A;Status: nucleic acid sequence not shown
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PH0962
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-120 <MAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Martin, T.; Duffy, S.F.; Carson, D.A.; Kipps, T.J. J. Exp. Med. 175, 983-991, 1992
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      Query Match
Best Local S
Matches 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Superfamily: immunoglobulin V region; immunoglobulin; Keywords: heterotetramer; immunoglobulin; 1-30/Region: framework 1
                                                                           Superfamily: immunoglobulin V region; immunoglobulin; Keywords: heterotetramer; immunoglobulin; 19-102/Domain: immunoglobulin homology < IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;51-67/Region: complementarity-determining;68-98/Region: framework 3;99-108/Region: complementarity-determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g heavy chain V region (G6+ T-L42) - human (fragment)
;Species: Homo sapiens (man)
;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 16-Aug-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36-50/Region:
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Best Local Similarity
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y maccn 69.9%;
Local Similarity 71.5%;
hes 88; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AQKFQGRVTITADESTSTAYMELSSLRSEDTAVYYCARGGVAGRP-HFDYWGQGTLVTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRG--NFPYYFDYWGQGTLVTVS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TLVIVSS
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        9;
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      Score 448.5; DB 2
Pred. No. 3.8e-33;
9; Mismatches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2;
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        Indels
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RESULT 10
C37267
Ig heavy chain V region (Py69) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change
                                                                                                                           C; Keywords: uerc.
F; 19-102/Domain:
                                                                                                                                                                                                                                                    R;Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R. J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences and A;Reference number: A38740; MUID:91177923; PMID:1706720
A;Accession: C37267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;1-19/Domain: signal sequence #status predicted <SIG>F;20-139/Product: Ig heavy chain V region I29 #status predicted <VAR>F;34-117/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
A27609
Ig heavy chain precursor V region (I29) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 15-Dec-1988 #sequence_revision 30-Jun-1991 #text_change
                    8
                                                                                                                                                                                           A;Status: preliminary; not compared with A;Molecule type: mRNA A;Residues: 1-128 <RUF>
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J. Immunol. 140, 1676-1684, 1988
A;Title: I.29 lymphoma cells express a nonmutated V-H gene
A;Reference number: A27609; MUID:88154467; PMID:3126234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
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                                                                                                                                                                                                                                                                                                                                                       C; Accession: C37267
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:M19401; NID:g195441; PIDN:AAA38303.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-139 <KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: A27609
                                                                                                                                                       Superfamily: immunoglobulin V region; immunoglobulin homology; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: A27609
                                                              Matches
                                                                            Query Match
Best Local 9
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                                                                              Similarity
VQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYY-FDYWGQGTLVTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EVQLVQSGAEVKKPGASVKISCKVSGYAPTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EVQLQQSGPELVKPGASVKMSCKASGYTFTDYVMHWVKQSNGKSLEWIGYINPYNDYTSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VOLQOSGPELVKPGASVKISCKTSGYTFTEYTMHWVKQSHGKSLEWIGGINPNNGGTSYN
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                                                                            69.5%;
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                                                                                                                                       homology
                                                          Score 446.5;
Pred. No. 5.8e
11; Mismatches
                                                                                                                                                                                                                                  conceptual translation
                                                          .8e-33;
ies 21;
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A; Molecule type: mRNA
A; Residues: 1-118 < CIM>
A; CIM>
A; Cross-references: EMBL:X76020; NID:g416093; PIDN:CAA53607.1; PID:g1334262
C; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
S38717
                                                                                                                                                                                                                                                                                                                           R;Cimanis, A.Y.
submitted to the EMBL Data
A;Reference number: S38713
A;Accession: S38717
                                                                                                                                                                                                                                                                                                                                                                                                  Ig heavy chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 20-Jun-2000
C;Accession: S38717
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A;Residues: 1-123 <KIP>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-98/Domain: immunoglobulin homology <IMM>
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A;Status: preliminary; nucleic acid sequence not shown; not compared with conceptual
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Kipps, T.J.; Tomhave, E.; Pratt, L.F.; Duffy, S.; Chen, P.P.; Carson, D.A. Proc. Natl. Acad. Sci. U.S.A. 86, 5913-5917, 1989
A;Title: Developmentally restricted immunoglobulin heavy chain variable region
A;Reference number: A33548; MUID:89345575; PMID:2503826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ig heavy chain V-1 region (WIL2) - human
C;Species: Homo sapiens (man)
C;Date: 17-Jan_1990 #sequence_revision 17-Jan-1990 #text_change 16-Aug-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Accession: D33548
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Best Local S
Matches 83
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                                                             3 QLVQSGAEVKKPGASVKISCKVSGYAFTNYNNYWVRQAPGKGLEWIGYIDPYYGDPGYSQ 62
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                                                                                                                                         Similarity
KFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCAR-RGNFPYYFDYWGQGTLVTVSS 119
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                                    QLQQSGPDLVKPGASVKMSCKASGYTPTNYVIHWVKQRPGQGLEWIGYIHPYNDGSKYND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRG----NFPYYFDYWGQGTLVT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QVQLVQSGAEVKKPGASVKVSCEASGYTFTGHYMHWVRQAPGQGLEWMGWINPNSGGTNY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKFKGKATLITVDKSTSTAYMELSSLRSEDTAVYYCARRGNE-----PYYFDYWGQGTLVT 116
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                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                     69.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69.5%; Score 446; DB 2; 67.5%; Pred. No. 6.2e-33; tive 18; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                          Library,
                                                                                                                     11;
                                                                                                                  Score 445.5; DB 2
Pred. No. 6.5e-33;
1; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                           November 1993
                                                                                                                                                  DB 2;
                                                                                                                  18;
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                                                                                                                Indels
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F;51-67/Region:
F;68-98/Region:
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                                                                                                                                                                                                                                                                                                    C; Keywords; heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-116 < MAR>
                                                                                                                                                                                                                                                                                                                                                                              R;Martin, T.; Duffy, S.F.; Carson, D.A.; Kipps, T.J.
J. Exp. Med. 175, 983-991, 1992
A;Title: Bridence for somatic selection of natural autoantibodies.
A;Reference number: PH0952; MUID:92202880; PMID:1552291
A;Accession: PH0959
                                                                                                                                                                                                                                                                                                                                                                    A;Status: nucleic acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig heavy chain V region (G6+ T-L26) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 16-Aug-1996
C;Accession: PH0959
B.Martin T. Diff.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-119 <LOS>
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                                                                                                                                                                                                                                                      ;15-98/Domain: immunoglobulin homology <IMM>;31-35/Region: complementarity-determining 1
                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                   Superfamily: immunoglobulin V region; immunoglobulin
                                                                                                                                                                   Query Match
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Best Local (
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                                                                                                                                                 Similarity
AQXFQGRVTITADESTSTAYMELSSLRSEDTAVYYCARGDN---WFDFWGQGTLVTVSS 116
                     SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYMGQGTLVTVSS 119
                                                             QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPGQGLEWMGGIIPIFGTANY
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                                                                                                                                                                                          complementarity-determining
                                                                                                                                    Conservative
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                                                                                                                                              69.18;
71.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69.3%; Score 445; DB 2; 70.6%; Pred. No. 7.3e-33; tive 14; Mismatches 21
                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                    not shown
                                                                                                                                            Score 443.5; DB 2
Pred. No. 9.7e-33;
                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                 homology
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Ig heavy: Main V region (6B12) - mouse (fragment)
() Species: Main V region (6B12) - mouse)
() Accession: JU0044, Species (7M, Marceseion)
() Main Cleave, V.H.; Naeve, C.W.; Metzger, D.W.
() Species: Main JU0043, MUID:88258372; PMID:2455014
() Accession: JU0043, MUID:88258372; PMID:2455014
() Accession: JU0043, MUID:88258372; PMID:2455014
() Accession: Species: EMBL:X12381
() A; Accession: Species: EMBL:X12381
() A; Accession: Species: EMBL:X12381; NID:952094; PIDN:CAA30939.1; PID:9930170
() Superfamily: immunoglobulin v region; immunoglobulin homology
() Koywords: Peteroces: EMBL:X12181; NID:952094; PIDN:CAA30939.1; PID:9930170
() Superfamily: immunoglobulin homology
() Koywords: Meterotetramer; immunoglobulin
() 110; Mismatches
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Result
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
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        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                     EVQLVESGAEVKKPGASVKVSCKASGYTFSSYYMHWVRQAPGQGLEWMGIINPSGGSTSY
                                                                     EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYMVRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYY---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AQKFQGKVTMTKDTSISTAYMELSRLRSDDTAVYYCARGGGRGLWFDPWGQGTLVTVSS
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124 AA;
                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                    AAD56258.1;
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                                                                                                                                                                              124
13580 MW; 1BAAACBD96ACD2A2 CRC64;
                                                                                                                                          70.2%;
70.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13205 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70.7%;
                                                                                                                       13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                   Score 450.5; |
Pred. No. 1.2e
l3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     87:184-192(1998).
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13E64F5345F4A16E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                          in rheumatic carditis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kalis N.N.,
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chain variable
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                                                                                                                   .2e-38;
ies 17;
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                                                                                                                   Indels
                                                                                                                                                       Length
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                                                                                                                                                         124;
- FDYWGQGTL
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114
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RESULT
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ID Q6
AC Q6
DT 05
DT 05
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AAH19337
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Best Local S
Matches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RX MEDLINE-2238257; Publed=12477932;

RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RX Klausner R.D., Collins F.S., Wagner I., Shemmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan K., Faramer A.A., Rubin G.M., Hong L.,

RA Hopkins R.F., Jordan R., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Hopkins R.F., Jordan R., Foshiyuki S., Carninci P., Prange C.,

RA Hopkins R.S., Lorguellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA B.S., Lorguellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Hohards S.M., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Hidhards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RA Wilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Holakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

RA Jones S.T. Mayers M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
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     Q6N041;
Q6N041;
05-JUL-2004
05-JUL-2004
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases EMBL; BC01937; AAH19337.1; -. Hypothetical protein. SEQUENCE 464 AA; 50891 MW; 2F80673E74E2A485 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Generation and initial analysis of more than 15,000 and mouse cDNA sequences."; and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hypothetical protein. Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISSUE=Primary B-Cells;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Primary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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02-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                     1 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYMVRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                        66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                          QVQLVQSGAEVKKPGASVKVSCKASGYTFTNYYMHWVRQAPGQGLEWMGIINPSGGSTDY
                                                                                                                                                                                                                                                                FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   al protein.
464 AA; 50891 MW; 2F80673E74E2A485 CRC64;
        (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
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                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69.9%;
     27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27,
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Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 449; DB 2;
Pred. No. 7.7e-38;
                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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RESULT 6
CAE45829
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Best Local
Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003597; Ig_cl.
InterPro; IPR003597; Ig_cl.
InterPro; IPR003596; Ig_v.
InterPro; IPR003596; Ig_v.
InterPro; IPR003596; Ig_v.
Ifam; PF007654; Cl-sec; Z.
InterPro; Ig; 3.
InterPro; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAE45829 PRELIMINARY; PRT; 498 AA.
CAE45829;
02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein DKFZp686016217 (Fragment).
DKFZP686016217.
                                                                                                                                                                              TISSUB-Human rectum tumor;
Poustka A., Albert R., Moom
Mewes H.W., Weil B., Amid C.
Submitted (AUG-2003) to the
EMBL; BX640710; CAE45829.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Poustka A., Albert R., Moosmayo
Mewes H.W., Weil B., Amid C.,
Submitted (AUG-2003) to the EMI
EMBL; BX640710; CAE45829.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                     Hypothetical
NON_TER
                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00290; IG_MHC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Human rectum tumor;
THE GERMAN HUMAN CDNA CONSORTIUM;
                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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NON_TER
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Name=DKFZp686O16217;
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Primates;
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69.9%;
67.7%;
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Pred.
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                                                                                            40B3208A84E03B46
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448.5; DB 2
No. 9.4e-38;
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G., Han M., Wiemann
                                                                                            CRC64;
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Q8VIJ1;
01-MAR-2002
                 Q924R8 PRELIMINARY; PRT; 146 AA. Q924R8; C1-DEC-2001 (TrEMBLrel. 19, Created) 01-DEC-2001 (TrEMBLrel. 19, Last sequence up 01-OCT-2003 (TrEMBLrel. 25, Last annotation VH186.2-D-J-C mu protein (Fragment).
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NON_TER
SEQUENCE
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2002 (TrEMBLrel. 20, Last 01-OCT-2003 (TrEMBLrel. 25, Last Anti-DNA heavy chain (Fragment). Name=J558;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00047; ig; 1
SMART; SM00406; IGv;
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anti-DNA from C3H-lpr mice and lupus m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN=C3H/HeJ-lpr/lpr;
MEDLINE=96409289; PubMed=8814271;
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EMBL; U59154; AAB02916.1; -.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
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13806 MW;
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Sciurognathi; Muridae;
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and VH CDR3 sequence
e with nephritis.";
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RESULT 9
Q6PJ
AC Q6PJ
DT Q5-J
DT 05-J
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DT 05-J
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                                                                                                                                                       QGEUB2 PRELIMINARY; PRT; 465 Am.

QGEUB2; PRELIMINARY; PRT; 465 Am.

PRT; 465 A
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Best Local S
Matches 85
        STRAIN=Czech II;
TISSUE=Mammary tumor
                                                                                                  SEQUENCE FROM N.A.
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Submitted (AUG-2001) to the
EMBL; AB067781; BAB63266.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
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PH1131; PH1131
PH1134; PH1134
PH1137; PH1137;
PH1139; PH1139;
PH1142; PH1142;
PH1142; PH1144;
PH1144; PH1144;
PH1147; PH1149;
PH1150; PH1150;
PH1150; PH1151;
PH1151; PH1151;
PH1152; PH1152;
PH1153; PH1153;
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riPro; IPR003596; Ig v.

ripr00047; 1g; 1.

Tr; SM00406; IGv; 1.

SITE; PS50835; IG LIKE; 1.
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PH1108;
PH1114;
PH1114;
PH1119;
PH1119;
PH1126;
PH1126;
PH1126;
PH1131;
PH1131
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARR--GNFPYYFDYWGQGTLVTVS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QVQLQQPGAELVKPGASVKLSCKASGYTFTSYWMHWVKQRPGRGLEWIGRIDPNSGGTKY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
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146 j
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(larity 70.2%; Pred. No. 5.3e-38;
Conservative 14; Mismatches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA;
             metastatized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16216 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Azuma
to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 5.36
4; Mismatches
                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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EMBI/GenBank/DDBJ databases.
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             ៥
lung.
MMTV-LTR/Wnt1 model
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AAH18280
ID AAH18
AC AAH18
AC AAH18
AC O2-MA
DT 02-MA
DT 02-MA
DT 02-MA
DT 02-MA
CO MAIS IN
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Best Local S
Matches 84
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RX MEDLINE=22388257; PubMed=12477932;

RA MEDLINE=22388257; PubMed=12477932;

RA Strausberg R.L., Feingold E.A., Schuer L.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Whiting M., Watra M.A.,

RA Whiting M., Touchman J.W., Green B.D., Dickson M.C.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

RA Kraywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

RA Generation and initial analysis of more than 15,000 full-length human

RL Proc. Natl. Acad Sci U. S. Asactese 1100 (100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR00359; IG.
InterPro; IPR00359; Ig-like.
InterPro; IPR003597; Ig-cl.
InterPro; IPR003597; Ig-cl.
InterPro; IPR003006; Ig-MHC.
InterPro; IPR003596; Ig-V.
Pfam; PP00647; Ig: 4.
SMART; SM00409; IG: 2.
SMART; SM00407; IGC: 1.
SMART; SM00406; IGV; I.
PR0SITE; PS00290; IG-MHC; UNKNOWN 1.
                                                                      Hypothetical protein.
Hypothetical protein.
Mus musculus (Mouse)
Eukaryota; Metazoa; Chordata;
Eukharyota; Eutheria; Rodentia;
                                                                                                                                                   02-MAR-2004 (TrEMBLrel.
02-MAR-2004 (TrEMBLrel.
02-MAR-2004 (TrEMBLrel.
       SEQUENCE FROM
STRAIN=Czech
                                                            NCBI_TaxID=10090;
                                                                                                                                                                                                                  AAH18280;
                                                                                                                                                                                                                                AAH18280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-Mammary tumor metastatized to lung.
Expression driven by an MMTV-LTR enhancer.;
Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; BC018280; AAH18280.1;
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                                                                                                                                                                                                                                                                                                                                            61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYMGQGTLVTVSS 119
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                                                                                                                                                                                                                                                                                                                                                                                       EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNWWWRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              al protein.
465 AA; 5
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1 N.A.
II; TISSUE=Mammary tumor;
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                                                                                                                                                       27,
27,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
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Last seq
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Pred. No. 4.6e
12; Mismatches
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                                                                            Craniata; Vertebrata; Euteleostomi
Sciurognathi; Muridae; Murinae; Mu
                                                                                                                                                 sequence update)
annotation update)
                                                                                                                                                                                                                              465
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RESULT
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RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carainci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., McEvan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
ROdriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.,
TISSUE-Mammary tumor metastatized to lung. MMTV-LTR/Wnt1 model.

(C Expression driven by an MMTV-LTR enhancer.)

(X MEDLINE-2238257, PubMed=12477932;

X Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Klausner R.D., Collins F.S., Wagner L., Scheenfer C.F., Bhat N.K.,

X Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan K., Farmer A.A., Abramson R.D., Wallahy S.J.

X Hopkins R.F., Jordan H., Moore T., Malek J.A., Gunaratne P.H.,

X Hopkins R.F., Jordan H., Moore T., Malek J.A., Gay L.J., Hulyk S.W.

X Halland R. L., Moore T., Marchan R.J., Link, Gibbs R.A.,

X Halland R. L., Moore T., Marchan R., Link, Gibbs R.A.,

X Halland R. L., Moore T., Marchan R., Link, Gay L.J., Hulyk S.W.

X Halland R. L., Moore M., Sodergren E.J., Lu X., Gibbs R.A.,

X Halland R. L., Moore M., Sodergren E.J., Lu X., Gibbs R.A.,
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Best Loc
Matches
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Hypothetical protein.
SEQUENCE 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation updat
Hypothetical protein AI324046.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=CZECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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"Generation and initial analysis
and mouse cDNA sequences.",
proc. Natl. Acad. Sci. U.S.A. 99:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q7TMK1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=AI324046;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22388257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EQUENCE FROM N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .A.
; TISSUE=Mamma'ry tumor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PubMed=12477932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51329 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        68.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 441.5; |
Pred. No. 4.6e
12; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          394F43C4E8DB3E21
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                                      Scheetz T.E.,
Prange C.,
Mullahy S.J.,
naratne P.H.,
naratne P.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           465;
                                                                                                                                                                                                                     ት F.,
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D.,
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Submitted (AUG-2003) to the EMBL/Gel
DR EMBL; BC055910; AAH55910.1; -.
DR InterPro; IPR007110; Ig-1ike.
DR InterPro; IPR003597; Ig cl.
DR InterPro; IPR003596; Ig_MHC.
DR InterPro; IPR003596; Ig_W.
DR Ffam; PP07654; Cl-set; 3.
DR Pfam; PP00047; ig; 1.
NR SMART; SM00406; IGy; 1.
NR PROSITE; PS50835; IG_LIKE; 4.
R PROSITE; PS50835; IG_LIKE; 4.
R PROSITE; PS00290; IG_MHC; UNKNOWN_1.
SEQUENCE 470 AA: From
RESULT
Q9GYZZ
ID GYZZ
ID GYZ
ID GYZZ
ID GYZZ
ID GYZ
ID GYZZ
ID
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                             EMBL; AF282622; AAG01452.1; -
HSSP; P01751; 1A6W.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; Ig; 1.
SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                                                                                                                       Q9GYZ2
Q9GYZ2;
Q1-MAR-2001 (TrEMBLrel. 16, Created)
Q1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Monoclonal anti-idiotypic antibody NP30 heavy chain
PROSITE;
NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                  SEQUENCE FROM N.A.
Song X.T., Feng Z.Q., Gu
Submitted (JUN-2000) to
                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                          Schistosoma japonicum (Blood fluke).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Whiting M., Madan A., Young A.C., She
Blakesley R.W., Touchman J.W., Green
Rodriguez A.C., Grinwood J., Schmutz
Krzywinski M.I., Skalska U., Smailus
                                                                                                                                                                                                                                                                                                    Schistosomatoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Expression driven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=CZECH II
TISSUE=Mammary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Generation and initial analysis of more than 15,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jones S.J., Marra M.A.;
                                                                                                                                                                                                                                                                                                                                                               (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EVQLQQSGPELVKPGASVKISCKASGYTFTGYYMHWVKQSHGKSLEWIGLVNPSNGDTSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNNYWVRQAPGKGLEWIGYIDPYYGDPGY
                                                            PS50835;
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  119
119 7
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  ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tumor metastatized ven by an MMTV-LTR
                                     IGv; 1.
                                                                                                                                                                                                                                                                                                    ; Platyhelminthes;
Schistosomatidae;
                                                                                                                Ig-like.
    13567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ketteman M., Madan A.,
Young A.C., Shevchenke
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
  MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                  X.H.;
e EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 440; DB 2;
Pred. No. 6.7e-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99:16899-16903 (2002)
  BA893873FD5FA6AB
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D.E., Schnerch
                                                                                                                                                                                                                                                                                                    Trematoda; D
Schistosoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MMTV-LTR/Wnt1 model
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Y., Bouffard
)ickson M.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rodrigues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                   variable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         full-length human
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1 G.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .B.,
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RC Expression driven by an MMTV-LTR enhancer;
RX MEDLINE-22388257; PubMed=12477932;
RX MEDLINE-22388257; PubMed=12477932;
RX MEDLINE-2388257; PubMed=12477932;
RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Strausberg R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Uddin T.B., Bonaldo M.F., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Ribhards S., McGray R.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren S.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Hating M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schmerch A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
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Best Local S
Matches 83
      InterPro; IPR003599; Ig.
InterPro; IPR003597; Ig_c1.
InterPro; IPR003597; Ig_c1.
InterPro; IPR003597; Ig_MC.
InterPro; IPR003006; Ig_MC.
InterPro; IPR003596; Ig_v.
Pfam; PF007654; C1-set; 3.
Pfam; PF00047; Ig; 4.
SMART; SM00409; IG; 2.
SMART; SM00400; IGc1; 3.
Hypothetical
                                                                                                                                                                                                                                             Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                              Jones S.J., Marra M.A.; "Generation and initial analysis of and mouse cDNA sequences.";
                                                                                                                                                                                                            EMBL; BC018535;
                                                                                                                                                                                                                               Submitted
                                                                                                                                                                                                                                                           IISSUE=Mammary tumor metastatized 
Expression driven by an MMTV-LTR (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hypothetical protein. Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q6PJA7
Q6PJA7;
                                                                                                                                                                                                                                                                                                STRAIN=Czech II;
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. STRAIN=Czech II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                           cDNA sequences.",
l. Acad. Sci. U.S.
                                                                                                                                                                                                         (DEC-2001) to the EMBL/GenBank/DDBJ
8535; AAH18535.1; -.
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(TrEMBLrel.
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69.7%;
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enhancer.;
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61 20

SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCAR----RGNFPYYFDYWGQGTLVT 116 EVQLQQSGPELVKTGASVKMSCKASGYTFSDYYMHWVKQSHGKSLEWIGYIYPNNGGNGY

79

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N [1]

PSQUENCE FROM N.A.

STRAIN=Czech II; TISSUB=Mammary tumor;

RX MEDLINE=22388257; PubMed=12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Rosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

whiting M., Madan A., Young A.C., Shevchenko Y., Butfard G.G.,
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AAHSS
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Best Local
                                                                                                                                                                             Hypothetical SEQUENCE 4
                                                                                                                                                                                                                          Submitted (DEC-2001) to the EMBL; BC018535; AAH18535.1;
                                                                                                                                                                                                                                                                              Strausberg R.;
                                                                                                                                                                                                                                                                                                           STRAIN=Czech
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffa
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Bu
Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A.,
                                                                                                                                                                                                                                                                                                                                                                                               Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 and mouse cDNA sequences.";
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical protein.
Mus musculus (Mouse).
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EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
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; TISSUE=Mammary tumor;
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Rodentia;
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69.1%;
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                                                                                                 Score 439; DB 2;
Pred. No. 8.5e-37;
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Pred. No. 8.5e-37;
4; Mismatches 20
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                                                                                                                                                                          165169C23D55D4AB CRC64;
                                                                         Mismatches
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A., Schein J.
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Scheet:
Prange C.,
Mullahy S.J.,
Tatne P.H.,
Tyk S.W.,
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RESULT 15
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Search completed: December 29, 2004, 18:05:21 Job time: 83.1416 secs
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SEQUENCE FROM N.A.

Clemens A., Rademaekers A., Specht C., Koelsch E.;

Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.

REMBL, AJ225171; CAB65236.1; -.

R PIR; PH0973; PH0973.

R HSSP; P01751; 1NQB.

R InterPro; IPR007110; Ig-like.

R InterPro; IPR003596; Ig_v.

R Pfam; PF00047; ig; 1.

R Pfam; PF00047; ig; 1.

R PROSITE; PS50035; IG_V; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 68.2%; Score 438; DB 2; Length 117; Best Local Similarity 71.4%; Pred. No. 2.2e-37; Matches 85; Conservative 13; Mismatches 19; Indels
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Q9QXF0;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Immunoglobulin heavy chain V-D-J region (Fragment).
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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117 AA; 13060 MW; D816AD0858A47E4C CRC64;
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Minimum DB
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seq length: 2000000000
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A Geneseq_23Sep04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2001s:*
4: geneseqp2001s:*
5: geneseqp2003s:*
6: geneseqp2003s:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   December 29, 2004, 17:37:57; Search time 81.7906 Seconds (without alignments) 521.928 Million cell updates/sec
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642
                                                                                                                                                                                                                                                                                                                                                                                         Gapop 10.0 ,
                                                                                                                                                                                    Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                     2002273 seqs, 358729299 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                              EVQLVQSGAEVKKPGASVKI.........GNFPYYFDYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                         Gapext 0.5
                                                                                                                                                                                                                                                                                                                   2002273
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

| 25                 | 24       | 23                 | 22                 | 21                 | 20                 | 19                | 18                 | 17                 | 16       | 15                 | 14                 | 13                 | 12                 | 11                | 10                 | 9                 | 8                  | 7                  | 6                  | տ                  | 4                  | u                  | 2                  | _        | Result<br>No.  |
|--------------------|----------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|----------------|
| 486.5              | 486.5    | 487                | 488.5              | 488.5              | 488.5              | 488.5             | 488.5              | 490.5              | 490.5    | 490.5              | 492                | 492                | 492                | 492.5             | 496.5              | 496.5             | 497.5              | 503                | 504                | 504                | 504                | 504.5              | 504.5              | 530      | Score          |
| 75.8               | 75.8     | 75.9               | 76.1               | 76.1               | 76.1               | 76.1              | 76.1               | 76.4               | 76.4     | 76.4               | 76.6               | 76.6               | 76.6               | 76.7              | 77.3               | 77.3              | 77.5               | 78.3               | 78.5               | 78.5               | 78.5               | 78.6               | 78.6               | 82.6     | Query<br>Match |
| 135                | 118      | 117                | 116                | 116                | 116                | 116               | 116                | 588                | 588      | 135                | 136                | 136                | 117                | 144               | 135                | 116               | 135                | 110                | 136                | 136                | 117                | 588                | 588                | 117      | Length         |
| (L)                | u        | σ                  | 8                  | 8                  | 4                  | 4                 | N                  | w                  | N        | w                  | 4                  | ω                  | œ                  | N                 | N                  | N                 | N                  | N                  | 4                  | ω                  | 8                  | w                  | N                  | N        | BB             |
| AAY80289           | ADG24496 | ABR42726           | ADO47719           | ADO47777           | AAB69672           | AAB69686          | AAR25726           | AAB12918           | AAW71881 | AAB07965           | AAB78869           | AAY77600           | ADL11893           | AAW73187          | AAR29016           | AAW22418          | AAR29017           | AAW84099           | AAB78865           | AAY77596           | ADL11892           | AAB12917           | AAW71880           | AAW84097 | ID             |
| Aay80289 Humanised |          | Abr42726 Anti-tiss | Ado47719 Humanised | Ado47777 Humanised | Aab69672 Humanised | Aab69686 Human Eu | Aar25726 Humanised | Aab12918 Anti-huma | -        | Aab07965 A heavy c | Aab78869 Anti-huma | Aay77600 Anti-huma | Adl11893 CDR trans | Aaw73187 Fragment | Aar29016 pUC-RVh-1 | Aaw22418 Reshaped | Aar29017 pUC-RVh-1 | Aaw84099 Vitronect | Aab78865 Anti-huma | Aay77596 Anti-huma | Adl11892 CDR trans | Aab12917 Anti-huma | Aaw71880 Anti-huma | manis    | Description    |

| 45        | 44        | 43        | 42        | 41       | 40        | 39        | 38        | 37       | 36        | 35<br>5  | 34        | ω<br>u    | 32               | 31        | 30       | 29        | 28        | 27       | 0          |
|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|----------|-----------|----------|-----------|-----------|------------------|-----------|----------|-----------|-----------|----------|------------|
| 483.5     | 483.5     | 483.5     | 483.5     | 483.5    | 483.5     | 483.5     | 483.5     | 483.5    | 483.5     | 483.5    | 483.5     | 483.5     | 483.5            | 483.5     | 484.5    | 486       | 486.5     | 486.5    | £00.0      |
| 75.3      | 75.3      | 75.3      | 75.3      | 75.3     | 75.3      | 75.3      | 75.3      | 75.3     |           | 75.3     | 75.3      | 75.3      | 75.3             | 75.3      | 75.5     | 75.7      | 75.8      | •        | \u0.0      |
| 139       | 139       | 139       | 139       | 135      | 135       | 135       | 135       | 135      | 135       | 122      | 116       | 116       | 116              | 116       | 144      | 117       | 144       | 144      | 144        |
| N         | N         | N         | N         | ω        | 4         | w         | w         | N        | N         | Q        | œ         | 4         | N                | N         | N        | σ         | N         | N        | ٨          |
| AAW62206  | AAW62205  | AAW65773  | AAW65774  | ADO47735 | AAB69653  | AAY80288  | AAY80291  | AAR06369 | AAR24107  | AA027203 | ADI01227  | AAB69645  | AAW37812         | AAW58514  | AAW73188 | ABR42728  | AAY28374  | AAW73189 | 7/ TC/ NWW |
| Aaw62206  | Aaw62205  | Aaw65773  | Aaw65774  | Ado47735 | Aab69653  | Aay80288  | Aay80291  | Aar06369 | Aar24107  | Aao27203 | Adi01227  | Aab69645  | Aaw37812         | Aaw58514  | Aaw73188 | Abr42728  | Aay28374  | Aaw73189 | Adw/JI/    |
| Humanised | Humanised | Anti-huma | Anti-huma | Humanisd | Humanised | Humanised | Humanised | Anti-Tac | Humanised | Chimeric | Murine an | Humanised | <b>Humanized</b> | Protein S | Fragment | Anti-tiss | Human hea | Fragment | neavy cua  |

ALIGNMENTS

AAW84097 standard; protein; 117 AA.

AAW84097;

15-MAR-1999 (first entry)

Humanised anti-alpha-v beta-3 MAb D12HZHC 1-0 ¥

Humanised antibody; monoclonal antibody; MAb; antibody engineering; mouse; human; vitronectin; alpha-v beta-3; receptor; restenosis; cancer; metastasis; rheumatoid arthritis; atherosclerosis; angiogenesis; diabetic retinopathy; inflammation; macular degeneration; osteoporosis; Paget's disease; hyperparathyroidism; hypercalcaemia; therapy; immunotherapy; D12HZHC-10.

Homo sapiens.

Synthetic.

RESULT 1
AAW84097
AXW84097
AX AAW8
AC Region Region Region /label= CDR2 99: .106 /label= CDR3 Location/Qualifiers /label= CDR1 50. .66

WO9840488-A1

17-SEP-1998.

12-MAR-1998; 98WO-US004987

12-MAR-1997; 97US-0039609P.

(SMIK ) SMITHKLINE BEECHAM CORP.

Jonak ZL, Johanson KO, Taylor AH;

WPI; 1999-034590/03. N-PSDB; AAV71799.

New anti alpha\_v beta\_3 vitronectin receptor antibodies - used for immunotherapeutic treatment of e.g. diabetic retinopathy, inflammatory disorders, atherosclerosis, restenosis, cancers or osteoporosis.

Claim 1; Page 58; 97pp; English.

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RESULT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
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             Region
                                                                                    Region
                                                                                                                                                            Region
                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                         Humanised antibody; Fas; CH11; autoimmune disease; rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                         Anti-human Fas humanised antibody CH11 heavy chain
                                                                                                                                                                                                                                                                                                                                       antibody engineering.
                                                                                                                                                                                              Protein
                                                                                                                                                                                                                                 Peptide
                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW71880 standard; protein; 588 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 117
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03; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     დ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARONYGSFA----YWGQGTLVTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARR--GNFPYYFDYWGQGTLVTVS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S 119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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         heavy chain"
                                                                                                  heavy chain"
                                                                                                                                                                         /labe]
                                                                                                                                                                                                                                               Location/Qualifiers
                                        label= CDR2
note= "complementarity
                                                                                                                 note= "complementarity
                                                                                                                                                                                                        'label= Sig_peptide
                                                                                                                                       label= CDR1
                                                                                                                                                                                             588
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                                                                                                                                                                     = Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 530; DB 2;
Pred. No. 7.7e-39;
7; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                       monoclonal arthritis;
                                        determining
                                                                                                             determining
                                                                                                                                                                                                                                                                                                                                                     antibody; MAb; apoptosis;
therapy; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 117;
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                                      region
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                                      CH11
                                                                                                               CH11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
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뭉 Ş 밁 Ś

JP2000154149-A

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RESULT 3
AAB12917
ID AAB1
XX AAB1
AC AAB1
XX A
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Cheavy chain, designated HmuH. HmuH is based on the heavy Chain (see
CAAW71888) of murine anti-human Fas monoclonal antibody CH11. The
Chumanised sequence was designed following selection of donor residues
CC from CH11 to be grafted onto acceptor molecule 21.28 (CL. 2 Heavy chain
CC sequences (see AAW71880-81) have been designed, and each can be used in
CC combination with any of 4 light chain sequences (see AAW71876-79) to
CC provide novel, claimed humanised CH11 IgM antibodies that lack a J chain.
CC apoptosis in cells expressing Fas antibodies are capable of inducing
CC apoptosis in cells expressing Fas (e.g. synoviceytes) and are useful in
CC the treatment of autoimmune disease and chronic rheumaned, as are vectors
CC sequences encoding the humanised antibodies are claimed, as are vectors
CC such as pHmuH5-1 including the HmuH nucleotide sequence (see AAV61363),
CC and host cells such as Escherichia coli pHWuH5-1 (FERM BP-5863)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                      Anti-human Fas immunoglobulin M heavy chain protein sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB12917;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB12917 standard; protein; 588 AA.
                                                                                                                                                                                                                        anti-Fas antibody.
                                                                                                                                                                                                                                                                                       Antirheumatic agent;
                                                                                                                                                                                                                                                                                                                                                                                                                                                16-NOV-2000
                                                                                                                                                                                                                                                       mmunosuppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 21; Page 105-107; 187pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Production of anti-Fas protein humanised antibodies - for use in inducing apoptosis on Fas expressing cells in the treatment of auto:immune diseases, especially rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-482965/42.
N-PSDB; AAV61363.
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heavy chain"
                                                                                                                                                                                                                                                   autoimmune
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81:7%;
                                                                                                                                                                                                                                                immunoglobulin M;
utoimmune disease;
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Pred. No. 6.6e-36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                IgM; apoptosis inducer;
treatment; rheumatism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nakahara
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to antirheumatic agents which comprise as cative ingredients an immunoglobulin M (IgM) protein. The IgM protein CC does not include a J segment, has apoptosis inducing activity, and CC consists of a light and heavy chain polypeptide produced synthetically. CC The agents of the invention exhibit antirheumatic and immunosuppressive cc activity and can be used to treat autoimmune diseases, especially CC rheumatism. The IgM molecule used in the invention has human Fas-antigen CC the IgM light and heavy chains (see AAA78267-A78272) and the CC corresponding protein sequences (see AAA78267-A78272) and the CC corresponding protein sequences (see AAB12913-B12918 and AAB12919), and CC corresponding protein sequences (see AAB12913-B12918 and AAB12919), and CC corresponding protein sequences (see AAB12918 and AAB12919), and CC chains used in the invention are represented by sequences (see AAB12918-B12910). Also CC corresponding the invention are represented by sequences AAA78213-CC A78266. Primers used for sequencing the human Ig DNA used in the CC invention are represented by sequences AAA78277-A78318 and AAA78335-CC A78337, while humanised anti-Fas Ig DNA sequencing primers are CC represented by sequences AAA78212 are specific for murine Ig DNA, and are used in the production of the agent of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
08-MAR-2002; 2002JP-00063835
                                08-MAR-2002; 2002JP-00063835
                                                                                                     JP2003261460-A
                                                                                                                                       Homo sapiens.
                                                                                                                                                                     cancer metastasis; human vascular endothelial receptor Flt-1; Cytostatic; lung cancer; CDR.
                                                                                                                                                                                                                        CDR transplant antibody heavy chain variable region
                                                                                                                                                                                                                                                            06-MAY-2004
                                                                                                                                                                                                                                                                                                                               ADL11892 standard; peptide; 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 588 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anti-human Fas humanizing antibody-containing antirheumatic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-454476/40.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EVQLVQSGAEVKKPGASVKVSCKASGYTFTDYNMHWVRQAPGQGLEWMGYIYPYNGGTGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EVOLVOSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 75-77; 109pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                     NOKFKSKATLTVDNSASTAYMELSSLRSEDTAVYYCAR----SYYAMDYWGQGTLVTVSS
                                                                                                                                                                                                                                                          (first entry)
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81.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 504.5; DB 3;
Pred. No. 6.6e-36;
6; Mismatches 11;
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                                                                                                                                                                                       growth factor; VEGFr;
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RESULT 5
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the information transmission which intervenes human vascular endothelial growth factor (VEGF) receptor Flt-1 as an active ingredient. The invention is useful for inhibiting spread of lung cancer, and effectively controls the spread of lung cancer. The present sequence represents a CDR transplant antibody heavy chain variable region.
                                                                                                     Gene recombinant antibodies, useful for diagnosis and as remedies diseases due to abnormal neovascularization e.g. proliferation or metastasis of solid tumor, rheumatoid arthritis, diabetic retinopa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antibody; human; vascular endothelial growth factor; VEGF receptor; Flt-1; neovascularisation; cell proliferation; metastasis; tumour; rheumatoid arthritis; retinopathy; psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Preventive or therapeutic agent of lung selective cancer metastasis containing the substance which inhibits the information transmission which intervenes human VEGF receptor Flt-1 as an active ingredient.
                                                                                                                                                                                                                                                  WPI; 2000-072431/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anti-human VEGF receptor Flt-1 antibody related peptide sequence #91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KYOW )
                                                                                                                                                                                                                                                                                                                                                             (KYOW ) KYOWA HAKKO KOGYO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
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                                                                                                                                                                                                                        AAZ87738.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QVQLVQSGAEVKKPGASVKVSCKASGYTFINYNMHWVRQAPGQGLEWMGAIFPGNGFTSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 19; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                   Ito M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to a preventive or therapeut ive cancer metastasis containing the substance
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80.7%;
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                      Nakamura
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or therapeutic agent of the substance which inhibits human vascular endothelial ive ingredient. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 117
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                                                                                                          retinopathy
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Claim 28; Page 199-200; 210pp; Japanese

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RESULT 6
AAB78865
ID AAB7
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XX WO20
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XX WO20
XX I7-7
PP 16-0
XX I7-7
XX WPI
X
CC This invention relates to a reagent for detecting differentiation of C monocytes and macrophages from haematopoietic stem cells, containing a CC substance which binds to human vascular endothelial growth factor (VEGF) CC receptor Flt-1. The invention also includes a method for diagnosing a CC disease in which the differentiation of monocytes and macrophages is CC implicated, using the method, containing a substance which binds to Flt-1 CC or a substance which inhibits the signal transduction of Flt-1. Diseases CC diagnosed using the method, containing a substance which binds to Flt-1 CC or a substance which inhibits the signal transduction of Flt-1 Diseases CC diagnosed or treated include inflammation, delayed CC hypersensitivity, malignant tumours and arteriosclerosis. AAF70190 - CC AAF70244, AAF70251 and AAF70258 represent DNA sequences encoding anti-CC the construction of the antibody fragments, and oligonucleotides used in the construction of the antibody fragments, and signal antibody is used in the construction of the invention. PCR primers AAF70245 - AAF78870 (excluding CC AAF70251) are used in the isolation of the antibody DNA sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Substances binding to human vascular endothelial growth factor receptor Flt-1, used for diagnosis and treatment of inflammatory diseases, arteriosclerosis, cancer and delayed hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 155; 164pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Differentiation; monocyte; macrophage; haematopoietic stem cell; cancer; vascular endothelial growth factor; VEGF; Flt-1; inflammation; antibody; delayed hypersensitivity; malignant tumour; arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-080847/09.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (КУОМ ) КУОМА НАККО КОБУО КК
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anti-human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB78865 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Flt-1 antibody
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Pred. No. 1.7e-36;
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Best Local
                                       antibody (MAb) D12 heavy chain variable region of the murine monoclonal humanised D12 VH (see also AAW84097). A synthetic gene (see AAV81901) encoding the protein was prepared from synthetic oligonucleotides and used to prepare an expression vector for humanised D12 VH. D12 is an anti-human alpha-v beta-3 vitronectin receptor MAb. Humanised D12 MAbs can be used for passive immunotherapy of disorders mediated by the alpha-v beta-3 vitronectin receptor, e.g. restenosis and angiogenic associated diseases
                                                                                                                                                                                                                                                                                                                                                   New anti alpha v beta_3 vitronectin receptor antibodies - used for immunotherapeutic treatment of e.g. diabetic retinopathy, inflammatory disorders, atherosclerosis, restenosis, cancers or osteoporosis.
                                                                                                                                                                                                                                                                                                                    Example 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mouse; human; vitronectin; alpha-v pera-j, reconstruction; archaritis; atherosclerosis; angiogenesis; distantion; macular degeneration; osteoperost's disease; hyperparathyroidism; hypercalcaemia; therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jonak ZL,
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The sequences given in AAR29016-17 are portions of monoclonal antibodies which were encoded by plasmids contained within the mouse hybridoma, AUK12-20. The DNA encoding the complementarity determining regions (CDR's) was isolated by polymerase chain reaction. These antibodies recognise human interleukin-6 receptor (II-6R). The hybridoma cells were transformed with plasmids containing fragments of the antibody gene which
                                                                                                                                                          Reconstituted human antibody to antigenicity and contains mouse
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19-FEB-1992;
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                                                                                                              Page 159-60;
                                                                                                                                                                                                                                                     Sato K,
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(first entry)
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92JP-00032084
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AUK12-20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alpha-4 integrin; humanised antibody; monoclonal antibody 21.6; asthma; atherosclerosis; AIDS; dementia; diabetes; tumour; metastasis; inflammatory bowel disease; rheumatoid arthritis; transplant rejection; graft versus host disease; nephritis; atopic dermatitis; psoriasis;
   Example
                                atherosclerosis,
                                                                                                           Bendig
                                                                                                                                                                                                                                                                                                                                                                              Region
                                               Uses of
                                                                                                                                                                                                      21-NOV-1996;
                                                                                                                                                                                                                                                                                                                 Region
                                                                                                                                                                                                                                                                                                                                               Regior
                                                                                                                                                                                                                                                                                                                                                                                                           Regior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Region
                                                                                                                                                                                                                                       29-MAY-1997.
                                                                                                                                                                                                                                                                    WO9718838-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-DEC-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW22418 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 135 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          caused the production of the antibody (Updated on 25-MAR-2003 to correct PN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94;
   6,
                              humanised alpha-4 integrin antibody clerosis, AIDS, dementia, etc.
                                                                                                                                          ATHENA NEUROSCIENCES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QVQLVQSGAEVKKPGASVKVSCKASGYSFTSYYIHWVRQAPGQGLEWIGYIDPFNGGTSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NOKFKGKVTMTVDTSTNTAYMELSSLRSEDTAVYYCARGGN----RFAYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  us host disease; nephritis; atopic dermatitis; psoriasis;
ischaemia; acute leukocyte mediated lung injury; therapy;
Page 44; 107pp; English
                                                                                                             Leger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                         95US-00561521
                                                                                                                                                                                                        96WO-US018807
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67..98
                                                                                                                                                                                                                                                                                                   106. .11
/label=
                                                                                                                                                                                                                                                                                                                                                /label= FR3
99. .105
                                                                                                                                                                                                                                                                                                                              /label=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label=
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79.0%;
                                                                                                           Saldanha J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FR1
                                                                                                                                                                                                                                                                                                                                                                                              CDR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDR1
                                                                                                                                                                                                                                                                                                                                                                                                                              FR2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 497.5;
Pred. No. 6.2e
11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₹
                                                                                                             Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from the hybridoma cell line. field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .2e-36;
                                                                                                           ST,
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RESULT 10
AAR29016
ID AAR29
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Best Local S
Matches 93
                    25-APR-1991;
19-FEB-1992;
                                                   24-APR-1992;
 (CHUS ) CHUGAI
                                                                         12-NOV-1992
                                                                                             WO9219759-A1
                                                                                                                            Region
                                                                                                                                                 Region
                                                                                                                                                                      Region
                                                                                                                                                                                                               Region
                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                       Region
                                                                                                                                                                                                                                                                                                                          Human; antibody; interleukin-6; receptor; IL-6R; complementarity determining region; monoclonal; h polymerase chain reaction; amplify.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This polypeptide comprises version 'b', of a reshaped human antibody AUX12-20 VH region. A DNA fragment encoding the polypeptide was subcloned into vector pUC19 for use as a template for PCR amplification and production of version 'a' of a reshaped human 21.6 VH region (see AAW22413) that can be used in the construction of novel humanised antibalpha-4 integrin antibodies. Claimed humanised antibodies are useful in the treatment of asthma, atherosclerosis, AIDS, dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, transplant rejection, graft versus host disease, tumour metastasis, nephritis, atopic dermatitis, psoriasis, myocardial ischaemia, and acute leukocyte mediated
                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                            Peptide
                                                                                                                                                                                                                                                                                                                                                                         pUC-RVh-1220b
                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
30-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                            AAR29016;
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR29016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 116 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYMGQGTLVTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NQKFKGKVTMTVDTSTNTAYMELSSLRSEDTAVYYCARGGN---RFAYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                          (revised)
(first en
SEIYAKU KK.
                  91JP-00095476.
92JP-00032084.
                                                  92WO-JP000544.
                                                                                                                                                                                                                                           /label
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                                                                                                                                                                                                                                                                                    location/Qualifiers
                                                                                                                                      label=
                                                                                                                                                         label= FR3
                                                                                                                                                                             label= CDR2
                                                                                                                                                                                                                       'label= CDR1
                                                                                                                                                                                                                                                                note=
                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; 135
                                                                                                                                                                    .117
                                                                                                                                                                                                                                                        .49
                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                           .135
                                                                                                                                                .124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           77.3%;
78.2%;
                                                                                                                                                                                                                                           l= FR1
                                                                                                                                                                                                    = FR2
                                                                                                                                                                                                                                                              "Leader
                                                                                                                                     CDR3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 496.5; DB 2;
Pred. No. 6.6e-36;
2; Mismatches 11;
                                                                                                                                                                                                                                                               peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                     ; CDR; PCR;
hybridoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116;
                                                                                                                                                                                                                                                                                                                                mouse;
PCR; plasmid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ω
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RESULT 11
AAW73187
ID AAW73
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                              A human type complementarity determining region transplanted against ganglioside GM2 - useful as an anti-tumour agent and diagnostic for related cancers.
                                                                                                                N-PSDB;
                                                                                                                WPI; 1998-575904/49.
N-PSDB; AAV08097.
                                                                                                                                                                         19-MAR-1997;
                                                                                                                                                                                                                      29-SEP-1998
                                                                                                                                                                                                                                             JP10257893-A.
                                                                                                                                                                                                                                                                                                     Ganglioside GM2;
                                                                                                                                                                                                                                                                                                                                                                                                 AAW73187
                                                                                                                                                 (КУОМ ) КУОМА НАККО КОСУО
                                                                                                                                                                                               19-MAR-1997;
                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                          anti-tumour agent
                                                                                                                                                                                                                                                                                                                        Fragment of ganglioside GM2 targeting antibody.
                                                                                                                                                                                                                                                                                                                                                  22-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                         AAW73187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequences given in AAR29016-17 are portions of monoclonal antibo which were encoded by plasmids contained within the mouse hybridoma, AUKI2-20. The DNA encoding the complementarity determining regions (CDR's) was isolated by polymerase chain reaction. These antibodies recognise human interleukin-6 receptor (II-6R). The hybridoma cells transformed with plasmids containing fragments of the antibody gene caused the production of the antibody from the hybridoma cell line. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 135 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 157-8; 207pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Reconstituted human antibody to human interleukin-6 receptor - has low antigenicity and contains mouse V-region complementarily determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1992-398882/48
N-PSDB; AAQ31391.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ľsuchiya M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93;
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                                                                                                                                                                                                                                                                                                                                                                                               standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QVQLVQSGAEVXKPGASVKVSCKASGYSPTSYYIHWVRQAPGQGLEWVGYIDPFNGGTSY
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                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                          97JP-00066981
                                                                                                                                                                                               97JP-00066981
                                                                                                                                                                                                                                                                                                   antibody;
                                                                                                                                                                                                                                                                                                                                                                                              protein; 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77.3%;
78.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bendig MM,
                                                                                                                                                   ፭
                                                                                                                                                                                                                                                                                                complementarity determining region; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 496.5; DB 2
Pred. No. 7.6e-36;
2; Mismatches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Saldanha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      135;
                                                                            antibody
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        were
which
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This sequence is a fragment of an antibody of the invention. The antibod of the invention is a human complementarity determining region transplanted antibody that reacts specifically with ganglioside GM2. DNA

The antibody

Example 4; Page 46-47; 66pp; Japanese.

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119

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ADLIT 12
ADLIT 1893
ID 11893
ID AC ADLIT
AC ADLI
                                                                                                                                            Query Match
Best Local 9
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Best Local
                                                                                                                    Matches
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                                                                                                                                                                                                                                  Sequence 117
                                                                                                                                                                                                                                                                                   The present invention relates to a preventive or therapeutic agent of lung selective cancer metastasis containing the substance which inhibits the information transmission which intervenes human vascular endothelial growth factor (VEGF) receptor Flt-1 as an active ingredient. The invention is useful for inhibiting spread of lung cancer, and effectively controls the spread of lung cancer. The present sequence represents a CDI transplant antibody heavy chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Preventive or therapeutic agent of lung selective cancer metastasis containing the substance which inhibits the information transmission which intervenes human VEGF receptor Flt-1 as an active ingredient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP2003261460-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer metastasis; human vas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding the antibody, and vectors and transformants containing it, can be used for the recombinant production of the antibody. The antibody itself can be used as an anti-tumour agent or as a diagnostic tool for related cancers. The antibody has antitumour activity against ganglioside GM2 positive cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAR-2002; 2002JP-00063835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDR transplant antibody heavy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL11893 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KYOWA HAKKO KOGYO KK SHIBUYA T.
                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                           EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
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QVQLVQSGAEVKKPGASVKVSCKASGYTFINYNMHWVRQAPGQGLEWMGAIFPGNGFTSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 20; 36pp; Japanese
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human vascular endothelial growth factor; VEGFr;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide;
                                                                                                                                         76.6%;
78.2%;
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80.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lung
                                                                                                              Score 492; DB 8;
Pred. No. 1.6e-35;
1; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 492.5; DB 2
Pred. No. 1.8e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chain variable region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
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                                                                                                                                                                 Length 117;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transmission ingredient.
                                                                                                                                                                                                                                                                                                                    represents a CDR
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                                                                                                                                                                                                                                                                                                                                                      and effectively
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a gene recombinant antibody that has specification with human vascular endothelial growth factor (VEGF) receptor Pit-1. The antibodies are useful for adjacency remedies for diseases due to abnormal neovascularisation such as proliferation or metastasis of solid tumor, arthritis in rheumatoid arthritis, diabetication pathy, premature retinopathy and psoriasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gene recombinant antibodies, useful for diagnosis and as remedies for diseases due to abnormal neovascularization e.g. proliferation or metastasis of solid tumor, rheumatoid arthritis, diabetic retinopathy
                                                                            ААВ78869;
                                                                                                                                AAB78869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 136
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-human VEGF
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                                                                                                                                standard;
                                                                                                                                                                                                                                                              SOKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGOGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                      QVQLVQSGAEVKKPGASVKVSCKASGYTFINYNMHWVRQAPGQGLEWMGAIFPGNGFTSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KOGYO KK
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78.2%;
                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 492; DB 3;
Pred. No. 1.9e-35;
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC This invention relates to a reagent for detecting differentiation of CC monocytes and macrophages from haematopoietic stem cells, containing a CC substance which binds to human vascular endothelial growth factor (VEGF) (VEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                        A heavy chain variable region of humanised 3S1 antibody.
             Antibody 3D1;
                                                                                                14-NOV-2000
                                                                                                                                                                                  AAB07965
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Substances binding to human vascular endothelial growth factor receptor Flt-1, used for diagnosis and treatment of inflammatory diseases, arteriosclerosis, cancer and delayed hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 157-158; 164pp; Japanese.
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93; Conser
                                                                                                                                                                            standard; protein; 135
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hypersensitivity; ma
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molecule; B7; humanised immunoglobulin;
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lial growth factor; VEGF; Flt-1; inflammation; antibody;
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78.2%;
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.9e-35;
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The present sequence represents the heavy chain variable region of the Chumanised murine antibody 3D1. The antibody has a binding specificity to B7 molecules. The antibody is used to construct humanized cimmunoglobulins, which comprise an antigen binding region of non-human corigin and a portion of a human immunoglobulin. The humanized cimmunoglobulins are useful for treating autoimmune diseases, infectious continuoglobulins are useful for treating autoimmune diseases, diabetes confilment inflammatory disorders, systemic lupus erythematosus, diabetes confilment inflammatory bowel disease, arthritis, inflammatory bowel disease, confilment or preventing transplant recipient or preventing transplant recipient, and treating proliferative disease (leukemia, lymphoma and cancer), anaemia (sixkle-cell anaemia, confilment congenital immunodeficiency diseases, and myeloid dysplasia syndrome
    Query Match
Best Local S
Matches 93
                                                       Sequence
                                                                                                                                                                                                                                                                                                                                  Humanized
from ATCC
                                                                                                                                                                                                                                                                         Example 3; Fig 2A; 162pp; English.
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24-JUN-1999;
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, Knight A,
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O'hara
             76.4%;
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₽ 80 NQKFKGKATMTVDKSTSTAYMELSSLRSEDTAVYYCARAA---WYMDYWGQGTLVTVSS 135

Search completed: December 29, 2004, 17:57:34 Job time : 83.7906 secs

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Result
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    Score
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1: /cgm2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgm2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

3: /cgm2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgm2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgm2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgm2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

7: /cgm2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

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10: /cgm2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*

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Copyright (c) 1993 - 2004 Compugen Ltd.
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7 US-10-774-076-12
7 US-10-774-076-17
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14 US-10-160-23-91
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622.182 Million cell updates/sec
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Sequence 17, Appl
Sequence 2, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 91, Appl
Sequence 12, Appl
Sequence 6, Appli
Sequence 6, Appli
Sequence 16, Appl
Sequence 17, Appl
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| <b>4</b> 5        | 44               | 43  | 42    | 41          | 40              | 39                | 38                | 37    | 36                | ω<br>5   | 34       | ω<br>u   | 32       | 31       |              | 29    | 28          | 27     | 26              | 25           | 24              | 23      | 22            | 21    | 20           | 19    | 18           | 17               | 16           | 15           | 14                |
|-------------------|------------------|-----|-------|-------------|-----------------|-------------------|-------------------|-------|-------------------|----------|----------|----------|----------|----------|--------------|-------|-------------|--------|-----------------|--------------|-----------------|---------|---------------|-------|--------------|-------|--------------|------------------|--------------|--------------|-------------------|
| 482.5             | 82.              | 82. | 482.5 | 482.5       | 483             | 483               | 483               | 483.5 | 483.5             | 483.5    | 483.5    | 483.5    | 483.5    | 483.5    | 483.5        | 483.5 | 483.5       | 483.5  | 483.5           | 483.5        | 483.5           | 483.5   | 483.5         | 483.5 | 483.5        | 483.5 | 83           | 83               | œ            | ü            | 486.5             |
| 75.2              | 75.2             |     | 75.2  |             | 75.2            | 75.2              | 75.2              |       | 75.3              | 75.3     | 75.3     | 75.3     | 75.3     | 75.3     | 75.3         | 75.3  | 75.3        | 75.3   | 75.3            | 75.3         | 75.3            | 75.3    | 75.3          |       | 75.3         |       |              | 75.3             | 75.3         | •            | 75.8              |
| 139               | 139              | 139 | 139   | 139         | 448             | 136               | 117               | 139   | 139               | 139      | 139      | 139      | 139      | 139      | 139          | 139   | 139         | 139    | 139             | 139          | 139             | 139     | 135           | 135   | 135          | 116   | 116          | 116              | 116          | 116          | 118               |
| 14                | 10               | 10  | 5     | 10          | 9               | 9                 | 9                 | 16    | 14                | 14       | 14       | 14       | 14       | 14       | 10           | 10    | 10          | 10     | 9               | 9            | 9               | 9       | 15            | 15    | 14           | 15    | 15           | 14               | 14           | 14           | 14                |
| US-10-218-253-111 | US-09-509-098-34 |     | Ė     | 09-269-921- | US-09-917-410-6 | US-09-956-206A-63 | US-09-956-206A-78 | •     | Ļ                 | -10-428- | -10-218- | -10-218- | -10-315- | -10-315- | -09-509-098- | 098-5 | 09-269-921- | Ļ      | US-09-355-925-8 | -09-355-925- | US-09-760-723-8 | 09-760- | -10-452-357-1 | ů     | -10-389-155- | 7     | -10-325-696- | US-10-389-155-25 | -10-340-189- | -10-127-890- | US-10-148-844-43  |
| 111,              | 34,              | 22, |       | e 111,      | 6, A            | 63,               | 78,               | φ,    | Sequence 8, Appli | 7,       | 12       | 125      | 8        | 7, 7     | 12           | 50,   | O           | e 125, | <b>,</b>        | 7            |                 | 7,      | 15            | 32,   | 32,          | e 25, | e 55,        | e 25,            | 86,          | 169,         | Sequence 43, Appl |

#### ALIGNMENTS

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Sequence 12, Application US/10774076

| Publication No. US20040210040A1
| GENERAL INFORMATION:
| APPLICANT: Protein Design Labs, Inc.
| APPLICANT: Landolfi, et al.
| TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and TITLE OF INVENTION: Psoridasis
| FILE REFERENCE: 05882.0064.NPUS01
| CURRENT APPLICATION NUMBER: US/10/774,076
| CURRENT FILING DATE: 2004-02-06
| NUMBER OF SEQ ID NOS: 39
| SOFTWARE: Patentin version 3.2
| SEQ ID NO 12
| LENGTH: 119
| TYPE: PRT
| ORGANISM: Artificial
| FEATURE:
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                                                                                                                                                                                                                                       OTHER INFORMATION: Humanized antibody US-10-774-076-12
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                                                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 119; Conservative
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                                                                         EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY 60
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RESULT

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APPLICANT: Protein Design Labs, Inc.

APPLICANT: Landolfi, et al.

TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Canc

TITLE OF INVENTION: Psoriasis

FILE REFERENCE: 05882.0064.NPUS01

CURRENT APPLICATION NUMBER: US/10/774,076

CURRENT APPLICATION NUMBER: US/10/774,076

NUMBER OF SEQ ID NOS: 39

SOFTWARE: Patentin version 3.2

SEQ ID NO 2

LENGTH: 119

TYPE: PRT

ORGANISM: mus sp.

US-10-774-076-2
; Sequence 9, Application US/10774076; Publication No. US20040210040A1; GENERAL IMPORMATION:
; APPLICANT: Protein Design Labs, Inc.
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US-10-774-076-9
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Best Local Similarity
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Publication No. US20040210040A1
GENERAL INFORMATION:
APDITON:
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Publication No. US20040210040A1

GENERAL INFORMATION:
APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregalin Antibodies and Their Use to Treat Cancer:
TITLE OF INVENTION: Pooriasis
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION UNMEER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin version 3.2
TENERAL TO THE TREATMENT OF THE TREATMEN
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ORGANISM: Artificial
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                                                                                                                                                                                                                                                                               SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS
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84.9%; Pred. No. 1.4e-44;
tive 9; Mismatches 9; Indels
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APPLICANT: Landolfi, et al.

ITITLE OF INVENTION: Amphiregulin Antibodies and TITLE OF INVENTION: Psoriasis

FILE REFERENCE: 05882.0064.NPUS01

CURRENT APPLICATION NUMBER: US/10/774,076

CURRENT EILING DATE: 2004-02-06

NUMBER OF SEQ ID NOS: 39

SOFTWARE: PatentIn version 3.2

SEQ ID NO 9

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; ORGANISM: Homo sapiens
US-10-223-880-5
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Best Local Similarity 85.1%;
Matches 103; Conservative
                                                                                                                                                                                                                                                                                                                     SEQ ID NO 5
LENGTH: 117
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                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: P50629C1
CURRENT APPLICATION NUMBER: US/10/223,880
CURRENT FILING DATE: 2002-08-20
PRIOR APPLICATION NUMBER: 09/380,910
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: PCT/US98/04987
PRIOR FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: JONAK, ZDENKA
APPLICANT: JOHANSON, KYUNG O.
APPLICANT: TOXLOR, ALEXANDER
TITLE OF INVENTION: ANIT-ALPHABETA3 HUMANIZED MONOCLONAL
TITLE OF INVENTION: ANTIBODIES
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Best Local Similarity
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PRIOR FILING DATE: 1997-03-12
NUMBER OF SEQ ID NOS: 45
                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 4.0
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117 8 117
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                                                               61 NQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARQNYGSFA--
                                                                                 61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARR--GNFPYYFDYWGQGTLVTVS 118
                                                                                                                             101;
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Pred. No. 1.9e-41;
7; Mismatches 5;
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Pred. No. 1.7e-44;
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RESULT 6 US-10-160-232-91

Sequence 91, Application US/10160232 Publication No. US20030088075A1

Lion No. US20030088075A1

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APPLICANT: JONAK, ZDENKA
APPLICANT: JOHANSON, KYUNG O.
APPLICANT: TAYLOR, ALEXANDER
TITLE OF INVENTION: ANIT-ALPHABETA3 HUMANIZED MONOCLONAL
TITLE OF INVENTION: ANTIBODIES
FILE REPERENCE: P50629C1
CURRENT APPLICATION NUMBER: US/10/223,880
CURRENT FILING DATE: 2002-08-20
PRIOR APPLICATION NUMBER: 09/380,910
PRIOR APPLICATION NUMBER: PCT/US98/04987
PRIOR APPLICATION NUMBER: PCT/US98/04987
PRIOR FILING DATE: 1999-09-10
                                                                     ; TYPE: PRT ; ORGANISM: Mus musculus US-10-223-880-12
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US-10-160-232-91
                                                                                                                                     SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 110
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 91
LENGTH: 136
Query Match
Best Local Similarity
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PRIOR FILING DATE: 1999-12-03
PRIOR APPLICATION NUMBER: 09/315,051
PRIOR FILING DATE: 1999-05-20
PRIOR APPLICATION NUMBER: 09/119,014
PRIOR FILING DATE: 1998-07-20
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APPLICANT: SHIBUYA, WASABUMI
TITLE OP INVENTION: ANTI-HUMAN VEGF RECEPTOR FLT-1 MONOCLONAL ANTIBODY
FILE REFERENCE: 209-107
CURRENT APPLICATION NUMBER: US/10/160,232
CURRENT FILING DATE: 2002-06-04
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APPLICANT: ITO, MIKITO
APPLICANT: HANAI, NOBUO
APPLICANT: KAWADA, YOKO
                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 45
                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1997-03
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PRIOR FILING DATE: 1997-11-21
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ORGANISM: Artificial Sequence
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188 96; Conserv
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                                                                                                                                                                                                                                NUMBER: 60/039,609
1997-03-12
78.3%;
85.1%;
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Score 503;
Pred. No. 5
DB 14;
.8e-39;
                   Length 110;
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US-09-249-011A-6

Sequence 6, Application US/09249011A Patent No. US20020176855A1

GENERAL

INFORMATION:

APPLICANT:

MAN SUNG

VASQUEZ, MAXIMILIANO CARRENO, BEATRIZ

CHERYL

APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:

CCELNIKER, ABBIE C COLLINS, MARY GOLDMAN, SAMUEL GRAY, GARY S. KNIGHT, ANDREA O'HARA, DENISE

APPLICANT:
APPLICANT:

VELDMAN, GEERTRUIDA M.

BONITA

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APPLICANT: NAKAMURA, KAZUYASU

APPLICANT: SHBUYA, MASABUMI

ITILE OF INVENTION: ANTI-HUMAN VEGF RECEPTOR FLT-1 MONOCLONAL ANTIBODY

FILE REFERENCE: 249-107

CURRENT FILING DATE: 2002-06-04

FRIOR APPLICATION NUMBER: US/10/160,232

CURRENT FILING DATE: 1999-12-03

PRIOR FILING DATE: 1999-12-03

PRIOR FILING DATE: 1999-12-03

PRIOR APPLICATION NUMBER: US/09/453,718

PRIOR APPLICATION NUMBER: 09/315,051

PRIOR APPLICATION NUMBER: 09/315,051

PRIOR APPLICATION NUMBER: 09/319,014

PRIOR APPLICATION NUMBER: 09/119,014

PRIOR FILING DATE: 1998-07-20

PRIOR FILING DATE: 1997-11-21

NUMBER OF: SEQ ID NOS: 96
                                                                                                                                                                                                                                                                          ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic protein
US-10-160-232-95
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US-10-160-232-95
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SEQ ID NO 95
LENGTH: 136
TYPE: PRT
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Best Local (
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Publication No.
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APPLICANT: ITO, MIKITO
APPLICANT: HANAI, NOBUO
APPLICANT: KAWADA, YOKO
                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                       61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
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80 NQKFKGRVTITVDKSTSTAYMQLRSLRSEDTAVYFCARDGD--YYFDYWGQGTLVTVSS 136
                                                                                        20 QVQLVQSGAEVKKPGASVKVSCKASGYTFINYNMHWVRQAPGQGLEWMGAIFPGNGFTSY
                                                                                                               1 EVQLVQSGAEVKXPGASVKISCKVSGYAFTNYNNYMVRQAPGKGLEWIGYIDPYYGDPGY 60
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                                                                                                                                                                                Conservative
                                                                                                                                                                             76.6%; Score 492; DB 14; 78.2%; Pred. No. 7.5e-38; tive 11; Mismatches 13;
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RESULT 11
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US-09-249-011A-24
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                                                                                                                                                                                                Query Match 98.2 Best Local Similarity 78.2 Matches 93; Conservative
                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/249,011A
CURRENT FILING DATE: 1999-02-12
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 24
LENGTH: 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS TITLE OF INVENTION: OF TREATMENT THEREWITH FILE REFERENCE: 08702 0081-00000 CURRENT APPLICATION NUMBER: US/09/249,011A CURRENT FILING DATE: 199-02-12 NUMBER OF SEQ ID NOS: 24 SOFTWARE: Patentin Ver. 2.1 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: RUP, BONITA
APPLICANT: VELDMAN, GEERTRUIDA M.
APPLICANT: VELDMAN, GEERTRUIDA M.
TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
TITLE OF INVENTION: 05 TREATMENT THEREWITH
FILE REFERENCE: 08702.0081-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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APPLICANT: VAS
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                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH: 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATI
                                                          80
                                                                        61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYMGQGTLVTVSS 119 :||||||||||||||
                                                                                                                            20 QVQLVQSGAEVKKPGSSVKVSCKASGYTFTDYAIQWVRQAPGQGLEWIGVINIYYDNTNY 79
                                                                                                                                                            1 EVQLVQSGABVKKPGASVKISCKVSGYAFTNYNNYWVRQAPGKGLEWIGYIDPYYGDPGY 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4, Application US/09249011A 
US20020176855A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VASQUEZ, MAXIMILIANO
CARRENO, BEATRIZ
CELNIKER, ABBIE CHERYL
COLLINS, MARY
COLLINS, MARY
GOLDMAN, SAMUEL
GRAY, GARY S.
KNIGHT, ANDREA
CUHARA, DENISE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                    NOKFKGKATMTVDKSTSTAYMELSSLRSEDTAVYYCARAA---WYMDYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QVQLVQSGAEVKKPGSSVKVSCKASGYTFTDYAIQWVRQAPGQGLEWIGVINIYYDNTNY 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                        76.4%; Score 490.5; DB 9; 78.2%; Pred. No. 3.7e-37; ative 11; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76.4%; Score 490.5; DB 78.2%; Pred. No. 1e-37; tive 11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 9;
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US-10-389-155-16

RESULT 12 US-10-389-417-16

Sequence 16, Application US/10389417 Publication No. US20040049014A1

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                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (415) 576-020
TELEPAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                              MOLECULE TYPE: protein SEQUENCE DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 011823-002650US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/484,537
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/10/389,155
FILING DATE: 13-Mar-2003
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/325,000
FILING DATE: 01-UN-1999
APPLICATION NUMBER: US 07/290,975
FILING DATE: 28-DEC-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Selick, Harold B.
TITLE OF INVENTION: Improved Humanized
NUMBER OF SEQUENCES: 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Queen, Cary L.
    61
                                   61 SQKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
                                                                                                                                                             94;
                                                                                                                 1 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                     Similarity
NQXFKSKATITADESTNTAYMELSSLRSEDTAVYYCAR--GRP-AMDYWGQGTLVTVSS
                                                                             QVQLVQSGAEVKKPGSSVKVSCKASGYTPTDYNMHWVRQAPGQGLEWIGYIYPYNGGTGY 60
                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
TULE TYPE: protei
                                                                                                                                                                                                                                                                                                                       LENGTH: 116 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/590,274
FILING DATE: 28-SEP-1990
APPLICATION NUMBER: US 07/634,278
FILING DATE: 19-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/310,252 FILING DATE: 13-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: San Francisco
                                                                                                                                                             Conservative
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Landolfi, N
Coelingh, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Co, Man Sung
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                                                                                                                                                                              76.1%;
79.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nicholas F.
Kathleen L.
                                                                                                                                                                                                                                                                SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                               576-0200
                                                                                                                                                             10;
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                                                                                                                                                         Score 488.5; DB
Pred. No. 1.3e-37
lO; Mismatches 1
                                                                                                                                                                                                                                                                16:
                                                                                                                                                                                               DB 14; Length
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GENERAL INFORMATION:

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RESULT 13

US-10-452-357-57

; Sequence 57, Application US/10452357

; Publication No. US20040058414A1

; GENERAL INFORMATION:
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-10-389-417-16
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION: <Unknown>
APPLICATION DATA:
APPLICATION NUMBER: US/09/325,000
FILING DATE: 01-JUN-1999
APPLICATION NUMBER: US 07/290,975
APPLICATION NUMBER: US 07/290,975
FILING DATE: 28-DEC-1988
APPLICATION NUMBER: US 07/310,252
FILING DATE: 13-FEB-1989
APPLICATION NUMBER: US 07/590,274
FILING DATE: 28-SEP-1990
                                                                                                                                                                                                                                                                                                                                             Match 76.1%; Score 488.5; DB 1 Local Similarity 79.0%; Pred. No. 1.3e-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Schieder, William P.
Landolfi, Nicholas P.
Coelingh, Kathleen L.
Selick, Harold E.
TITLE OF INVENTION: Improved Humanized Immunoglobulins
NUMBER OF SEQUENCES: 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
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                                                                                                                                                  61 NQKFKSKATITADESTNTAYMELSSLRSEDTAVYYCAR--GRP-AMDYWGQGTLVTVSS
                                                                                                                                                                                                                                                                                                                             94;
                                                                                                                                                                                                                                                                            1 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                                   SOKFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Smith, William M. REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/634,278 FILING DATE: 19-DEC-1990 APPLICATION NUMBER: US 08/484,537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/389,417 FILING DATE: 13-Mar-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94111-3834
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                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              576-0300
                                                                                                                                                                                                                                                                                                                         10; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                 DB 15; Length 116;
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; ORGANISM: Homo US-10-148-844-43
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PRIOR FILLING DATE: 2000-11-22
PRIOR APPLICATION NUMBER: 09/487,200
PRIOR FILLING DATE: 1995-06-07
PRIOR PRIOR DATE: 1995-06-07
PRIOR APPLICATION NUMBER: 07/634,278
PRIOR FILLING DATE: 1990-12-19
PRIOR APPLICATION NUMBER: 07/590,275
PRIOR FILLING DATE: 1990-09-28
PRIOR APPLICATION NUMBER: 07/310,252
PRIOR FILLING DATE: 1989-02-13
PRIOR FILLING DATE: 1989-02-13
Query Match 75.8%; Score 486.5; DB 14; Length 118; Best Local Similarity 77.9%; Pred. No. 2.1e-37; Matches 95; Conservative 7; Mismatches 13; Indels 7;
                                                                                                                                                                                        SEQ ID NO 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 43, Application US/10148844
Publication No. US20030096403A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: KR 2000-57891
PRIOR FILLING DATE: 2000-10-02
PRIOR APPLICATION NUMBER: KR 2001-60966
PRIOR PILLING DATE: 2001-09-29
NUMBER OF SEQ ID NOS: 52
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: A HUMANIZED ANTIBODY TO SURFACE ANTIGEN TITLE OF INVENTION: VIRUS AND A PREPARING METHOD THEREOF FILE REFERENCE: 118.15-US-WO CURRENT APPLICATION NUMBER: US/10/148,844
CURRENT FILING DATE: 2002-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Hyo-Jeong Hong APPLICANT: Keun-Soo Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Landolfi, Nicholas
APPLICANT: Coelingh, Kathleen
APPLICANT: Selick, Harold
TITLE OF INVENTION: Improved Humanized Immunoglobulins
FILE REFERENCE: 05882.0078.CNUS01
CURRENT APPLICATION NUMBER: US/10/452,357
CURRENT FILING DATE: 2003-05-30
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 07/290,975
PRIOR FILING DATE: 1988-12-28
NUMBER OF SEQ ID NOS: 113
                                                                                                                                          LENGTH: 11
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 116
TYPE: PRT
ORGANISM: Artificial
FEATURE:
FORMATION: humanized M195 heavy chain antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 NQKFKSKATITADESTNTAYMELSSLRSEDTAVYYCAR--GRP-AMDYWGQGTLVTVSS 116
                                                                                                                                                                118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY 60
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TOPOLOGY: linear ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-127-890-169
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US-10-127-890-169
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Query Match
Best Local Similarity
Matches 92; Conserv
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                                                                                                                                                                                                         TELEX: 650 388-1248 INFORMATION FOR SEQ ID NO: 169: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: MCNICHOLAS, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 200-70.P4
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/127,890
FILING DATE: 23-Apr-2002
CLASSIFICATION: <UNKnown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/646,360
FILING DATE: 13-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Better, Marc D.
Carroll, Stephen F.
Studnika, Gary M.
TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
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STATE: Illinois
COUNTRY: USA
                                                                                                                                             LENGTH: 116 amino acids
TYPE: amino acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                    TELEPHONE: 312/707-8889
TELEFAX: 312/707-9155
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/901,707
FILING DATE: 19-UTN-1992
APPLICATION NUMBER: US 07/787,567
FILING DATE: 04-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: PCT/US94/05348
FILING DATE: 12-MAY-1994
APPLICATION NUMBER: US 08/064,691
FILING DATE: 12-MAY-1993
APPLICATION NUMBER: US 07/988,430
FILING DATE: 09-DEC-1992
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STREET: 500 West Madison Street, 34th floor
          Conservative
                        75.3%;
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    Score 483.5; DB 14; Length 116; Pred. No. 3.9e-37; Indels 3;
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Search completed: December 29, 2004, 18:42:00 Job time: 68.8024 secs

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Database
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1: geneseqp1990s:*
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576
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521.928 Million cell updates/sec
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Maximum Match 100%
Listing first 45 summaries
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geneseqp20008:*
geneseqp20018:*
geneseqp20028:*
geneseqp2003a8:*
geneseqp2003b8:*
geneseqp20048:*
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                                                                                                                                                                                                                                                                                2002273
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Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being pland is derived by analysis of the total score distribution. printed,

#### SUMMARIES

| 25                 | 24                 | 23                 |                    |                    |                    | 19                 |                    | 17                 | 16       | 15                 | 14       | 13       | 12       | 11       | 10        | 9                  | 00                 | 7                  | o                 | v        | 4.       | w                  | N                  | _                  | Result<br>No.  |   |
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| 93.9               |                    | 93.9               | ٠                  | 94.6               | •                  | •                  |                    | 94.8               | ٠        | ٠                  |          | •        | 95.1     |          |           | 96.0               | 96.4               | 96.4               | 96.4              | 96.4     | 96.5     | ٠                  | 97.0               |                    | Query<br>Match | P |
| 272                | 110                | 110                | 256                | 402                | 443                | 428                | 256                | 256                | 214      | 230                | 229      | 229      | 261      | 112      | 128       | 114                | 131                | 131                | 131               | 131      | 269      | 415                | 269                |                    | Length         |   |
| 7                  | N                  | N                  | N                  | N                  | N                  | N                  | N                  | N                  | N        | 7                  | 7        | 7        | ω        | N        | N         | 7                  | σ                  | N                  | N                 | N        | N        | N                  | N                  | N                  | BB             |   |
| ADE29203           | AAR54136           | AAR05038           | AAR22584           | AAR56485           | AAW24025           | AAW24027           | AAR22582           | AAR22568           | AAW27091 | ADM07543           | ADM07544 | ADM07542 | AAY44990 | AAY03868 | AAR95949  | ADM07541           | ABU58892           | AAW85058           | AAW06211          | AAR09422 | AAR56482 | AAR56484           | AAR54756           | AAR88720           | ID             |   |
| Ade29203 Multivale | Aar54136 CHA255 li | Aar05038 Metal che | Aar22584 ScFvB18 c | Aar56485 ScFV pRAS | Aaw24025 Single ch | Aaw24027 Single ch | Aar22582 ScFvB18 c | Aar22568 ScFvB18 c | -        | Adm07543 Murine im | 4        | 2 Murine | Muri     | 8 SM3    | ) 3G3 var | Adm07541 Murine im | Abu58892 Mouse ant | Aaw85058 Mouse Br- | Aaw06211 MAb Br-3 |          | 2 ScFV   | Aar56484 ScFV pRAS | Aar54756 pRAS111 b | Aar88720 Mouse ant | tion           |   |

| 45       | 44        | 43        | 42        | 41       | 40        | 39        | 38        | 37        | 36        | 35       | 34        | ω<br>u    | 32        | 31        | 30        | 29        | 28        | 27       | 26        |
|----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|
| 513      | 514       | 515       | 517       | 517      | 519       | 519       | 519       | 522       | 524       | 528      | 530       | 530.5     | 533       | 536       | 538       | 539       | 540       | 540      | 541       |
| 89.1     | 89.2      | 89.4      | 89.8      | 89.8     | 90.1      | 90.1      | 90.1      | 90.6      | 91.0      | 91.7     | 92.0      | 92.1      | 92.5      | 93.1      | 93.4      | 93.6      | 93.8      | 93.8     | 93.9      |
| 109      | 240       | 218       | 120       | 109      | 218       | 135       | 129       | 391       | 218       | 110      | 108       | 109       | 110       | 256       | 435       | 256       | 256       | 256      | 273       |
| N        | -         | 4         | 4         | N        | 4         | 4.        | σ         | σ         | 4.        | N        | 7         | ຫ         | N         | N         | N         | N         | N         | N        | 4         |
| AAW39798 | AAP80157  | AAB20358  | AAB98667  | AAW39797 | AAB20360  | AAB20356  | ABU08928  | ABR83649  | AAB20359  | AAR28435 | ADM93152  | AAE17792  | AAR04938  | AAR22583  | AAR56483  | AAR22586  | AAR22585  | AAR22587 | AAB70763  |
| Aaw39798 | Aap80157  | Aab20358  | Aab98667  | Aaw39797 | Aab20360  | Aab20356  | Abu08928  | Abr83649  | Aab20359  | Aar28435 | Adm93152  | Aae17792  | Aar04938  | Aar22583  | Aar56483  | Aar22586  | Aar22585  | Aar22587 | Aab70763  |
| Variable | Biosynthe | Anti-chel | Murine pr | Variable | Anti-chel | Anti-chel | Mouse amy | TS1 VL ch | Anti-chel | Sequence | Murine an | Escherich | Chelate-s | ScFvB18 o | ScFV pRAS | ScFvB18 o | ScFvB18 o | ScFvB18  | Single ch |

#### ALIGNMENTS

### RESULT 1 AAR88720

AAR88720 standard; protein; 112 A

## AAR88720;

26-SEP-1996 (first entry)

Mouse antibody lambda chain variable region consensus sequence.

Antibody; stability; instability; mutagenesis; amino acid frequency; canonical sequence approximation; substitution; immunoglobulin; light chain; variable region; VI-region; diagnosis; immunoassay; cancer treatment; autoimmune disease; immunotoxin; improved yield.

# Mus musculus.

DE4425115-A1

18-JAN-1996.

15-JUL-1994; 94DE-04425115

15-JUL-1994; 94DE-04425115.

(BOEF ) BOEHRINGER MANNHEIM GMBH.

Steipe B, Steinbacher S;

WPI; 1996-069594/08

Functional antibodies modified to increase or decrease stability - have specific amino acid substns. in the variable domain, determined by reference to consensus sequences. consensus sequences.

Claim 2; Page 35; 43pp; German.

Consensus sequences were established for antibody variable regions from human and mouse heavy and light (kappa and lambda) chains. In addition, frequency tables listing the amino acids which can be found at each position were compiled. In a new method, mutations are introduced into an antibody variable domain by reference to the frequency table. When an amino acid is replaced by one which occurs at a higher frequency at that position, the resulting antibody chain is more stable than the wild-type; when an amino acid is replaced by one which occurs less frequently (or not at all), the resulting antibody is less stable than the wild-type. Stablised antibodies are useful as diagnostic reagents, as catalysts and stablised antibodies are useful as diagnostic reagents, as catalysts and in treatment of cancer, autoimmune diseases and infections. Destabilised

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Best Local Similarity 97.3
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06-DEC-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antibodies have improved (faster) pharmacokinetic properties. The present sequence is the mouse lambda light chain variable region consensus sequence
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sites; PCR; polymerase chain reaction.
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(first entry)
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Pred. No. 1.2e-39;
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RESULT 3
AAR56484
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
         (IMCR ) IMPERIAL CANCER RES TECHNOLOGY.
                                                                               17-JAN-1994;
                                               15-JAN-1993;
                                                                                                                 21-JUL-1994
                                                                                                                                                                                                            Amplification; single chain variable region fusion protein;
                                                                                                                                                                                                                                                                                                                                                                        AAR56484 standard; protein; 415
                                                                                                                                                      WO9415644-A1
                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                          ScFV pRAS109
                                                                                                                                                                                                                                                                                            25-MAR-2003
26-MAR-1995
                                                                                                                                                                                                                                                                                                                                                AAR56484;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR54756 showes an ScFv (VH and VL partner domains are linked via a flexible oligopeptide) between the HindIII and EcoRI sites of pRAS111. The 130 bp HindIII-Peti fragment of pRAS111 (AAQ64806) was used to replace the corresponding fragment of pRAS111 (AAQ64807), to generate pRAS118. This generates a NIP-reactive ScFv (NIP = 4-hydroxyl-3-iodo-5-nitrophylacetic acid) with a BglII cloning site immediately downstream of the pelB leader, suitable for inserting fragments of Ad5 fibre. The invention is concerned with the fusion of an ScFv with the Ad5 fibre withat the fusion sequence can be used to target cells for gene therapy. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 269 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 69-70; 110pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Virus with modified binding moiety specific for the target cells - used to deliver genes for gene therapy and cancer treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Spooner RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-167477/20.
N-PSDB; AAQ64817.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (IMCR ) IMPERIAL CANCER RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAY-1994.
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107; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                        and pRAS113.
                                                                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Epenetos AA;
                                             93GB-00000686
                                                                               94WO-GB000087
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 559; DB 2; I
Pred. No. 3.2e-39;
0; Mismatches 3;
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Length 269; Indels

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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 107;
                                                                                                                                                                                                                  New cpds.
esp. for t
                                             The sequence is that EcoRI site obtd. by F correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCFV pRAS107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequence is that of the ScFv pRAS109 and pRAS113 between HindIII a EcoRI site obtd. by PCR. See also AAR56482-5. (Updated on 25-MAR-2003 correct PN field.)
Sequence 269 AA;
                                                                                                                                                                                                                                                                                                              WPI; 1994-248907/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
26-MAR-1995
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                                                                                                                                         Disclosure; Fig 4; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                Epenetos
                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-ЛП-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9415644-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amplification; single chain variable region fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR56482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR56482 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 10; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Epenetos
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                                                                                                                                                                                                                                                                                                                                                                                                             IMPERIAL CANCER
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                                                                                                                                                                                                          . comprising a targetting portion and a cytotoxic portion - untreating mammals for destroying target cells, partic. tumour
                                                                                                                                                                                                                                                                                                                                                                Å,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        415 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        comprising a targetting portion and a cytotoxic portion - used
treating mammals for destroying target cells, partic. tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                Spooner
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             93GB-00000686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94WO-GB000087.
                                                                   that of the ScFv pRAS107 and pRAS111 between HindIII and by PCR. See also AAR56482-5. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.0%;
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Pred. No. 5e-39;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein;
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3 to
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Query Match

96.5%;

Score 556;

DB 2;

Length 269;

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61

PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110

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RESULT 5
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                                                  Matches
                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 96.4%;
Matches 106; Conservative
                                                                                                                     The sequence is used in the prodn. of a chimeric antibody mol. comprising two light chains and two heavy chains, each having a constant region (human) and a variable region (murine) having specificity to an antigen bound by murine monoclonal antibody (MAb) Br-3. The chimeric antibodies can be used for any purpose for which the original murine MAbs can be used, with the advantage that they are more compatible with the human body. They are esp. used for the diagnosis and treatment of cancer. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                 Sequence 131 AA;
                                                                                                                                                                                                                                     Claim 13; Page 123 + Fig 14; 173pp;
                                                                                                                                                                                                                                                                                                                                                              (ITGE-)
                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-1988;
19-JUN-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-MAR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Br-3 Light Chain V Region (mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR09422 standard; protein; 131
                                                                                                                                                                                                                                                             human region murine variable region,
                                                                                                                                                                                                                                                                          Chimeric mouse-human antibodies -
                                                                                                                                                                                                                                                                                                                WPI; 1990-115825/15.
                                                                                                                                                                                                                                                                                                                                     Better MD, Horwitz AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-SEP-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-SEP-1988;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antigen; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Monoclonal antibody; chimera; light;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR09422;
                                                                                                                                                                                                                                                                                                                                                                                                                                       13-SEP-1988;
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                                                               Similarity
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                QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
  QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGL1GGTNNRAPGV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYTNHWVFGGGTKLTVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                                                                                                                                                                                                                                                                              GENETIC ENG INC.
                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                                  88US-00241744.
88US-00243739.
88US-00253002.
89US-00367641.
89US-00382768.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                            96.4%;
                                                                                                                                                                                                                                                                                                                                     Robinson
                                                0
                                               Score 555; DB 2;
Pred. No. 3.2e-39;
0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 5.7e-39;
1; Mismatches 3;
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                                                                                                                                                                                                                                                             prepd. using
                                                                                                                                                                                                                                                                                                                                     RR,
                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        heavy; chain; constant; variable;
                                                                                                                                                                                                                                                                                                                                       Lei
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                                                4.
                                                                                                                                                                                                                                                               genes coding for constant tumour antigen.
                                                                                                                                                                                                                                                                                                                                     Chang
                                                                         Length 131;
                                                Indels
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129

AAW06211 standard; protein;

131

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RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-SEP-1988,
08-SEP-1988,
13-SEP-1988,
04-OCT-1988,
19-JUN-1989,
21-JUL-1989,
                                                                                                                                                                                                                                                                                                                        Sequence 131 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimeric mouse-human antibodies - recognise a human tumour antigen, used for the treatment and diagnosis of human cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAT43436.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chang CP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chimeric antibody; monoclonal antibody; Br-3; antibody engineering; tumour; antigen; breast carcinoma; lung carcinoma; colon carcinoma; ovary carcinoma; cancer; diagnosis; therapy; light chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMOX ( AMOX)
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12-FEB-1997
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PARPSGSLIGDKAALTITGTQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 129
                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                                                                                 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fig 14; 102pp; English.
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(first entry)
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88US-00243739

88US-00253002

89US-00367641

89US-00382768

91US-00659401
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Pred. No. 3.2e-39;
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                                                                                                                                                                                                           4;
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AAW85058
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Matches 106
                                                                                                                                                                           The present sequence represents the heavy chain variable region of murine antibody Br-3. The sequence was used to create chimeric mouse-human immunoglobulins which recognise the human tumour antigen bound by antibody ING-1 (produced by hybridoma cell line ATCC HB 9812). The chimeric antibodies also have an antigen-binding site that competitively inhibits the binding of antibody ING-1, and mediate complement-dependent cytolysis of target cells or antibody-dependent cellular cytotoxicity to target cells. The chimeric antibodies can be used for therapeutic purposes in the treatment of human cancer. (Updated on 20-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-SEP-1988;
13-SEP-1988;
04-OCT-1988;
                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                           Chimeric antibody specific for human tumour antigen immunoassay, imaging or antitumour agent.
                                                                                                                                                                                                                                                                                                   Example 3; Fig 14; 92pp; English.
                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                   Horwitz AH,
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27-DEC-1994;
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21-JUL-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chimeric immunoglobulin; treatment; human cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heavy chain variable region; murine antibody Br-3; antibody ING-1; chimeric immunoglobulin; human tumour antigen; chimeric antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse Br-3 heavy chain variable region
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16-APR-1999
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DB; AAV71154.
                                                                                                106;
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                                                                                                          Similarity
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                                                         QAVVTQESALTTSPGETYTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                            QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
             PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                                                                                                                              131 AA;
PARFSGSLIGDKAALTITGTQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
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88US-00241744.
88US-00243739.
88US-00253002.
89US-00367641.
89US-00367641.
89US-0038276.
89US-0038276.
91US-00659401.
94US-00364001.
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                                                                                                        96.48;
96.48;
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Pred. No. 3.2e-39;
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                                                                                              Mismatches
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The invention describes an antibody comprising a human constant region CC and a variable region having specificity for the human tumour antigen CC bound by the ING-1 antibody, where the ING-1 is produced by cell line CC HB9812 as deposited with ATCC, and the antibody has the same affinity as the ING-1 for the human tumour antigen. The antibody is useful in an CC immunoassay method for detecting an antigen in a sample by contacting the CC label-detectable antigen in the sample with the antibody, detecting the CC antigen in an animal by contacting the antigen; for CC use in an imaging method for revealing the presence of a label-detectable and relating the antigen, detecting the label and relating the gresence of the antigen; for CC detected label to the presence of the antigen; and for killing cells carrying an antigen by contacting the antibody with a part of the animal CC allowing the killing to occur. The antibodies are useful in tumour CC diagnosis and therapy. The chimeric antibodies bind to the surface of human tumour cells but do not bind detectably to normal cells, e.g., CC fibroblasts, endothelial cells or epithelial cells in the major organs. CC the high biological activity of the chimeric antibodies against human cclls but do not bind detectivity with normal tissues comply that these antibodies may mediate selective destruction of CC malignant tissue. The presence of human rather than murine antigenic cells contacting the chimeric antibodies increases their resistance to clearance chimeric antibodies increases their resistance to clearance enhances the potential utility of these chimeric antibodies. This is the amino acid sequence of a mouse antibody light chain crianially and the creation of an anti-human tumour antigen-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antibody for detecting antigen in animal or killing cells carrying antigen comprises human constant region and variable region having specificity for human tumor antigen bound by ING-1 antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Fig 14; 101pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mouse; human tumour antigen; anti-human tumour antigen-antibody; ING-1 antibody; cell line HB9812; immunoassay; imaging; tumour diagnosis; tumour therapy; cytostatic; light chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABU58892 standard;
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89US-00382768.

89WO-US003852.

91US-00659401.

94US-00364001.
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88US-00241744.
88US-00243739.
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                                                                                                                                                            The invention relates to a novel canine heavy or light chain variable domain polypeptide. The protein of the invention demonstrates antiallergic activity and may be used for treating canine allergy, possibly via gene therapy. The current sequence is that of a murine immunoglobulin light chain variable domain protein of the invention.
                                                                                                                                        Sequence 114 AA;
                                                                                                                                                                                                                                                         New canine heavy and light chain variable treating canine allergy.
                                                                                                                                                                                                                                                                                                                                                                                                              24-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                murine; mouse; heavy; immunogl
antibody light chain variable
gene therapy; 15A2.
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                                                                                                                                                                                                                                                                                                                                                                21-DEC-2001; 2001US-0344874P
                                                                                                                                                                                                                                                                                                                                                                                      20-DEC-2002; 2002WO-US041362
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                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                         IDEXX LAB
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                                                           QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
               PARPSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                               QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGL1GGPNNRAPGV
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                                                                                          96.0%; ilarity 96.4%; Conservative
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                                                                                                                                                                                                                                 2; 130pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunoglobulin;
variable domain;
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                                                                                                                                                                                                                                  English.
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Pred.
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Pred. No. 4e-39;
0; Mismatches
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No. 3.2e-39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              variable domain
                                                                                                                                                                                                                                                                    domain polypeptides, useful for
                                                                                          4
                                                                                                               Length 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 131;
                                                                                            Indels
                                                                                          0;
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                               63
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RESULT 10 AAR95949

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RESULT 11
AAY03868
                                                                                                                                                                                                                                                                                       This sequence represents the variable lambda chain of an antibody CC produced by the 3G3 hybridoma cell line. AAR95946-R95948 represent CC sequences for variable regions of an antibody produced by the hybridoma cell line HNK-20. HNK-20 and 3G3 are murine hybridoma cell lines, that CC virus (RSV). The DNA encoding these sequences were isolated using primers CC specific for the 5' untranslated region of the variable region, and for CC primer sequences). The DNA encoding these sequences can be inserted into CC primer sequences). The DNA encoding these sequences can be inserted into CC primer sequences). The DNA encoding these sequences can be inserted into CC primer sequences). The DNA encoding these sequences can be inserted into CC primer sequences. The DNA encoding these sequences can be inserted into CC primer sequences and broading these sequences can be inserted into CC primer sequences. The DNA encoding these sequences can be inserted into CC expression of chimeric and isotype-switched antibodies. The CC such as pneumonia and bronchiolitis, in humans and animals. By using the producting fragments that have to be adapted for recombinant antibody cexpression. Also, by using the genomic DNA, no knowledge of the DNA CC sequence encoding the target variable region is required. Chimeric CC of the host being treated, are less likely to cause adverse immune
                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 106; Conserv
                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Page 29; 75pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA encoding variable region of antibody HNK-20 - for treating respiratory syncytial virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1996-286826/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Berdoz J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antibody; HNK-20; variable heavy chain; hybridoma; murine; IgA; mouse; F glycoprotein; respiratory syncytial virus; RSV; constant region gene; chimeric antibody; isotype-switched antibody; therapy; infection; human; pneumonia; bronchiolitis; animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09616974-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR95949;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3G3 variable lambda chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR95949 standard; protein; 128 AA.
                                                                     80
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                                                                                                                                                                                                                                                                                       128
                                                                                       PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL 109
                                                                                                                                  QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                                                                           QAVVTQESALTTSPGETYTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kraehenbuhl
                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95WO-US015716.
                                                                                                                                                                                                                               96.0%;
97.2%;
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                                                                                                                                                                                                                0
                                                                                                                                                                                                          Score 553; DB 2;
Pred. No. 4.6e-39;
0; Mismatches 3
                                                                                                                                                                                                                                            Length 128;
                                                                                                                                                                                                            Indels
                                                                                                                                                                                                          0,
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밁 Ś 밁 5

RESULT 12
AAY44990
ID AAY44
XX
AC AAY44
XX
AC AAY44
XX
DT 23-MA
XX
DE Murin

standard;

protein;

261

B

23-MAY-2000 AAY44990; AAY44990

(first entry)

Murine anti-Lewis Y antibody single-chain Fv fragment.

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                                                                                                                   Query Match
Best Local S
Matches 105
                                                                                                                                                                                                sm3 antibody bound to an epitope can be used to design minics of the antibody or the epitope. The crystals comprise at least an epitope binding fragment of the SM3 antibody bound to a peptide recognised by the epitope binding site of SM3. The products and methods can be used to develop agents for the detection of tumour cells and for therapy against tumours. MUC1 epitope mimics can also be used to prevent or decrease an immune response, e.g. in the therapy of diseases caused by autoimmune response, inflammatory disorders or transplant rejections such as graft versus host disease. The present sequence represents the amino acid sequence of a light chain variable region of SM3 antibody
                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                             The invention relates to a process for preparing a crystal using cadmium structure factors or structural coordinates obtained from the crystal of
                                                                                                                                                                                                                                                                                                                                                                                                                                       New SM3 antibody crystal structures - used to e.g. tumors, autoimmune disorders, allergies, transplant rejection.
                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 279; 316pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SM3 antibody; epitope; mimic; crystal; tumour; MUC1 epitope; allergy; immune response; arthritis; multiple sclerosis; asthma; diabetes; inflammatory disorder; transplant rejection; graft versus host diseas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freemont PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (IMCR ) IMPERIAL CANCER RES TECHNOLOGY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SM3 light chain variable region.
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   63
                                                                                                                      105;
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                                                                                                                                 Similarity
                                                                                                                                                                               112
                       RFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
                                                     VVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGVPA
                                                                        VVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQBKPDHLFTGLIGGTINRVPGVPA
RESGSLIGDKAALTITGAQTEDEAIYECALWYSNHWVEGGGTKLTVLG
                                                                                                                    Conservative
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                                                                                                                               95.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sternberg MJE,
                                                                                                                   <u>.</u>
                                                                                                                 Score 550; DB 2;
Pred. No. 7.1e-39;
0; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   develop agents for treating inflammatory disorders or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PA,
                                                                                                                                          Length 112;
                                                                                                                 Indels
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110
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RESULT 13
ADM07542
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                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                       Best
                                                                                                                                                                                                                                                                                                  cytostatic, immunostimulatory, antileukaemia and antiproliferative activities. These compounds can be used for diagnosing, preventing and treating malignant cell growth related to malignancies of haematopoietic cells e.g. lymphomas and leukaemias, or to solid tumours e.g. carcinomas, melanomas and sarcomas. The present sequence is a murine anti-Lewis Y antibody single-chain FV (scFV) fragment which is used in the construction of heterominibodies comprising CH1 (first constant domain of human 1gG1 heavy chain), CK (constant region of human Ig-kappa light chain) and CD80 molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The patent discloses heterominibodies which are multifunctional compounds produceable in a mammalian host cell as a secretable and fully functional heterodimer of two polypeptide chains, where one of the polypeptide chains comprises, a CHI-domain (constant domain of an immunoglobulin heavy chain) and the other chain comprises CL-domain (constant domain of an immunoglobulin light chain). The polypeptide chains further comprise, fused to the constant domains at least two (poly)peptides having different receptor or ligand functions, where further at least two of the different (poly)peptides lack an intrinsic affinity for one another and are linked via the constant domains. The heterominibodies have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Murine; Lewis Y; LeY; antibody; single-chain Fv fragment; scFv; heterominibody; multifunctional compound; CH1-domain; CL-domain; heavy chain; constant domain; light chain; CD80 molecule; immunoglobulin; cytostatic; immunostimulatory; antileukaemia; diagnosis; antiproliferative; prevention; treatment; malignant; haematopoietic cell; lymphoma; leukaemia; solid tumour; carcinoma; melanoma; sarcoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New multifunctional compounds useful for preventing and/or treating malignant cell growth and for detection and diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mue
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                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000-195265/17.
                                                                                                                                                                                                     105;
                                                                  82
                                                                                                  8
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                                                                                                                                                                  w
                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MICROMET GES
                                                                                         RFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                                                                                                                                    VVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGVPA 62
                                                                                                                                                                                                                                                                      261 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fig 6; 166pp;
                                                                                                                                   VVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRVPGVPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dreier T,
                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98EP-00114082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-EP005416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                95.1%;
97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baeuerle PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BIOMEDIZINISCHE FORSCHUNG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunoglobulin_heavy_chain_variable_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 548; DB
Pred. No. 2.6e
0; Mismatches
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                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                Length 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zettl
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                                                                129
                                                                                                  110
                                                                                                                                                                                                  0;
                                                                                                                                                                                                  Gaps
                                                                                                                                   81
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murine; m antibody

mouse; heavy; immunoglobulin;
y light chain variable domain;

antiallergic; allergy; IgE.

20-MAY-2004

(first entry)

immunoglobulin

15A2/2VIR light

chain

variable

domain

24-JUL-2003

WO2003060080-A2

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RESULT 14
ADM07544
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel canine heavy or light chain domain polypeptide. The protein of the invention demonstrates antiallergic activity and may be useful for treating canine a possibly via gene therapy. The current sequence is that of a immunoglobulin light chain variable domain protein of the inv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                                                                                                                                                                                                                                               ADM07544 standard; protein; 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New canine heavy and light treating canine allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy; 15A2/1NGQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             murine; mouse; heavy; immunoglobulin; antibody light chain variable domain;
                                                                                                                                                                                                                                                                                                                                                   ADM07544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-DEC-2001; 2001US-0344874P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Fig 5; 130pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
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Pred. No. 2.7e-38;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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a murine
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RESULT 15
ADM07543
ID ADM07
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Matches 105; Conservative
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                                                                                                           Krah ER,
                                                                                                                                                                                                                                                                                                                                                                     Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                murine; mouse; heavy; immunoglobulin; antibody light chain variable domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine immunoglobulin 15A2/1FBI light chain variable domain protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel canine heavy or light chain variable domain polypeptide. The protein of the invention demonstrates antiallergic activity and may be useful for treating canine allergy, possibly via gene therapy. The current sequence is that of a murine immunoglobulin light chain variable domain protein of the invention.
New canine heavy and light chain variable treating canine allergy.
                                                                   WPI; 2003-598521/56.
                                                                                                                                                                                              21-DEC-2001; 2001US-0344874P
                                                                                                                                                                                                                                                                                   24-JUL-2003.
                                                                                                                                                                                                                                                                                                                                                                                                              gene therapy; 15A2/1FBI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADM07543;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADM07543 standard; protein; 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 229 AA;
                                                                                                                                                   (IDEX-) IDEXX LAB INC
                                                                                                                                                                                                                                        20-DEC-2002; 2002WO-US041362
                                                                                                                                                                                                                                                                                                                             WO2003060080-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6; Fig 5; 130pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New canine heavy and light chain variable domain polypeptides, useful for treating canine allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-598521/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Krah ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-DEC-2001; 2001US-0344874P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-DEC-2002; 2002WO-US041362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGL1GGPNNRAPGV
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                                                                                                         Guo H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                           Aiyappa A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.0%;
96.3%;
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Pred. No. 2.7e
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                                                                                                           Lawton
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.7e-38;
                    domain polypeptides, useful
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Example 6; Fig 5; 130pp; English.

relates to a novel canine heavy or light chain variable

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                                                                                                                                    Matches
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Best Local :
                                                                                                                                                                                                                                 domain polypeptide. The protein of the invention demonstrates antiallergic activity and may be useful for treating canine allergy, possibly via gene therapy. The current sequence is that of a murine immunoglobulin light chain variable domain protein of the invention.
                                                                                                                                                                                                 Sequence 230 AA;
                                                                                                                                                  Local
                                                                                                                                 al Similarity 96.
                    61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL
62 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL
                                                                                     1 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                              QAVVTQESALITISPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGPNNRAPGV
                                                                                                                                               95.0%;
                                                                                                                               Score 547; DB 7;
Pred. No. 2.7e-38;
0; Mismatches 4
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Search completed: December 29, Job time: 78.6047 secs 2004, 17:57:32

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
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Match
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1: uniprot_sprot:*
2: uniprot_trembl:*
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576
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         QAVVTQESALTTSPGETVTL.....ALWYSNHWVFGGGTKLTVLG
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                                                                                                                                                                                                                                                                                                                                                   LV2B MOUSE
LV1A MOUSE
LV2A MOUSE
LV0A HUMAN
LV6C HUMAN
Q9NSD6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LV1D MOUSE
LV1E MOUSE
LV1E MOUSE
Q8VDE2
Q8CGS1
LV1C MOUSE
Q9ETT3
     AAH18749
LV3A_HUMAN
LV2D_HUMAN
Q96JD0
Q6IPQ0
                                                                                                                    LV6A HUMAN
Q6GMX4
LV1G HUMAN
LV11 HUMAN
                                                                                                                                                                                               Q96JD1
Q8N5F4
Q7SYU1
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Q8WUK4
                                                                                                                                                                                                                                                       Q8WTU6
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 P01726 mus musculu
P01727 mus musculu
P01727 mus musculu
Q8vde2 mus musculu
Q8cg81 mus musculu
Q8cg81 mus musculu
P01725 mus musculu
P01725 mus musculu
P01729 mus musculu
P04211 homo sapien
Q8mv64 homo sapien
Q8m544 homo sapien
Q8m544 homo sapien
Q8m546 homo sapien
P06316 homo sapien
Q6jd3 homo sapien
Q6jd3 homo sapien
Q6jd0 homo sapien
Q6jd0 homo sapien
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                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
LV1D MOUSE
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DR HSSP;
DR Interp
DR Interp
DR SMART;
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Best Local Sim:
Matches 105;
 LV1E MOUSE
P01727;
21-JUL-1986
21-JUL-1986
10-OCT-2003
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                                                                                                                                                                                               80
                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                        -
                                                                                                                                                                                                                                                                                                                                                                   Similarity
(Rel. 01, Created)
(Rel. 01, Last sequence update)
(Rel. 42, Last annotation update)
chain V region S43 precursor.
                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                  STANDARD;
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Result

33022433111543110 3302235433111543110

Minimum Maximum

DB BB

Searched:

Database

| 219.5              | 220.5              | 220.5              | 221.5              | 222      | 222    | 222.5              | 223                | 223                | 225.5    | 225.5              | 226                | 226.5              | 226.5              |
|--------------------|--------------------|--------------------|--------------------|----------|--------|--------------------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|--------------------|
| 38.1               | •                  | 38.3               |                    | •        | •      | •                  |                    | •                  | 39.1     | ٠                  | 39.2               | •                  | 39.3               |
| 233                | 235                | 111                | 111                | 236      | 236    | 245                | 236                | 230                | 235      | 235                | 236                | 235                | 167                |
| N                  | N                  | _                  | ۲                  | N        | N      | N                  | N                  | N                  | N        | N                  | N                  | N                  | N                  |
| Q8TBC9             | BAC85358           | LV3B_HUMAN         | LV2L HUMAN         | AAH30983 | Q6PIQ7 | Q6GNC5             | Q96E61             | Q7Z2U3             | AAH33102 | Q6PIK1             | Q8NEJ1             | Q6GMW6             | BAC05245           |
| Q8tbc9 homo sapien | Bac85358 homo sapi | P80748 homo sapien | P80422 homo sapien | 83 hom   |        | Q6gnc5 xenopus lae | Q96e61 homo sapien | Q7z2u3 homo sapien | )2 hon   | Q6pik1 homo sapien | Q8nej1 homo sapien | Q6gmw6 homo sapien | Bac05245 homo sapi |

#### ALIGNMENTS

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HSSP; P01724; 1A6V.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; 1g; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE; 1.
Immunoglobulin v region; Signal.
SIGNAL 1 19
CHAIN 20 129
DOMAIN 20 129
SEQÜENCE 129 AA; 13465 MW; A57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P01726;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
21-JUL-1986 (Rel. 01, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
1g lambda-1 chain V region H2020 precursor.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

MEDLINE-79084170; PubMed=103630;

MEDLINE-79084170; PubMed=103630;

MERCHART O., Hozumi N., Tonegawa S.;

Mernard O., Hozumi N., Tonegawa S.;

"Sequences of mouse immunoglobulin light chain genes before and after somatic changes.";

Somatic changes.";

Cell 15:1133-1144(1978).

Cell 15:1133-1144(1978).
                                                                                                                                                                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
                                                                                                 PARFSGSLIGDKAALTITGAQTEDBAIYFCALWYSNHWVFGGGTKLTVLG
                                                                                                                                                                                                                                                                                                                                                  13465 MW; A57C8910157C1316 CRC64;
                                                                                                                                                                                                                                                                                    95.8%;
                                                                                                                                                                                                                                                             Score 552; DB 1;
Pred. No. 1.4e-46;
1; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                      Ig lambda-1 chain V
Ig-like.
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Best Local S
Matches 105
                                                                                                                    Appella E.;
Unpublished results,
Cesari I.M., Weigert
                                                                                                                                                                                                                                REVISIONS (MOPC 104E).
MEDLINE=73229669; PubMed=4516208;
                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=71107854;
Appella E.;
"Amino acid sequer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUL-1986 (Rel. (21-JUL-1986 (Rel. (21-JUL-1986 (Rel. (21-JUL-2004 (Rel. (21-2004 (Rel. (21-20
                                                                          Cesari I.M., Weign
Proc. Natl. Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 20-129 (MOPC 104E AND MEDLINE=71107854; PubMed=5276767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Burstein Y., Schechter I.;
"Amino acid sequence of the NH2-terminal extra precursors of mouse immunoglobulin lambda1-type chains.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 1-29 (MOPC 104E), AND REVISIONS MEDLINE=77148916; PubMed=403522;
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LV1B MOUSE
P01724;
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    SEQUENCE
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE; 1.
Immunoglobulin V region; Signal
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InterPro; IPR003596; Ig_v.
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Bothwell A.L.M., Paskind M., Reth M., Imanishi-Kari T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                  results, cited by:
Weigert M.;
Acad. Sci. U.S.A. 70:2112-2116(1973).
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01, Last sequence update)
45, Last annotation update)
1 V regions MOPC 104E/RPC20/J558/S104 precursor.
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(J558 AND S104).
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Rodentia;
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Sciurognathi; Muridae; Murinae; Mus.
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RI Proc. Natl. Acad. Sci. U.S.A. 70:2112-2116(1973).
CC -1- MISCELLANEOUS: Compositions and partial sequences of RPC 20 show CC no differences from MOPC 104E. The sequences of J558 and S104
CC -1- MISCELLANEOUS: These proteins were isolated from serum or urine of tumor-bearing mice.
CC -1- MISCELLANEOUS: The MOPC 104E precursor was synthesized in a cell-cree system directed by mRNA isolated from MOPC 104E myeloma CC polysomes. Met-1 was lacking in 90% of the chains. It is probably Cc rapidly cleaved after synthesis.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like domain.
CC PDB; 1A54E. Tray; L/M/N-20-129.
CC PDB; 1A6W; X.-ray; L-21-128.
CC PDB; 1A6W; X.-ray; L-21-129.
CC PDB; 1A6W; X.-ray; L-21-129.
CR PDB; 1A5W; X.-ray; L-21-129.
CR PDB; 1A6W; X.-ray; L-21-129.
CR PDB; 1A5W; X.-ray; L-21-129.
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Cesari I.M., Weigert M.
"Mouse lambda-chain sec
Proc. Natl. Acad. Sci.
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95.5%;
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                                                                                                                                                                                                                                                        Score 551; DB 1; 1
Pred. No. 1.8e-46;
2; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                         03629939D5791AC0 CRC64;
                                                                                                                                                                                                                                                                                        Length 129;
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Q8VDE2; Q8VDE2; 01-MAR-2002 01-MAR-2002

(TrEMBLrel. (TrEMBLrel. PRELIMINARY;

20,

Created)
Last sequence update)

129 B

25,

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QBCGS1
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Best Local Sim
Matches 103;
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SEQUENCE
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InterPro; IPR003596; Ig v.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; P850835; IG_LIKE; 1.
                                                                                                                                                                                                                                                            Wang Z., Munshi K., Osawa F
Submitted (SEP-2002) to the
EMBL; AY151141; AAN75453.1;
HSSP; P01724; 1A6V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (NOV-2000) to the EMBL; AJ291694; CAC82790.1; HSSP; P01724; 1A6V.
                                                                                                                                         Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                            STRAIN=BALB/c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
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Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
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Name=4G12-A-H10;
                                                                                                                                                                                                           InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Fragment)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biologie Biochimie,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
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129 AA;
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nilarity 93.6%;
Conservative
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; 12034 MW;
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Rodentia;
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  93.0%;
94.6%;
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26, Last annotation update)
lambda light chain variable
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EMBL/GenBank/DDBJ
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  Score 535.
Pred. No.
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Pred. No. 2
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5.5; DB 2
. 5.3e-45;
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DBJ databases
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Lyon, Lyon, France.
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1
Direct protein sequencing; I
DOMAIN 1 106
                                                                                                                                                                                                                                                                                   Q9ET13;
Q9ET13;
01-MAR-2001
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21-JUL-1986
                                                                                                                                      01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 25, Last sequence up
01-OCT-2003 (TrEMBLrel. 25, Last annotation
Imunoglobulin light chain variable region (F
Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vert
Mammalia; Eutheria; Rodentia; Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
SEQUENCE
SEQUENCE FROM N.A.
STRAIN=BALB/C;
Song M.-Y., Kang H.-K.,
Submitted (JUL-2000) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P01724; 1A6V.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
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MEDLINE=73229669; PubMed=4516208

Cesari I.M., Weigert M.;

"Mouse lambda-chain sequences.";

Proc. Natl. Acad. Sci. U.S.A. 70
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21-JUL-1986 (Rel. 01, Last
05-JUL-2004 (Rel. 44, Last
05 (Rel. 44, Last
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                                                                                                                  NCBI_TaxID=10090;
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse)
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110 AA;
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nilarity 92.7%;
Conservative
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11654 MW;
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    W.-J., Moon H.-J., Song T.
EMBL/GenBank/DDBJ databases
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Best Local :
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21-JUL-1986 (Rel. 01, Last 8)
05-JUL-2004 (Rel. 44, Last a)
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SMART; SM00406; IGV; 1.

PROSITE; PS50835; IG LIKE; 1.

NON TER 109 109

SEQUENCE 109 AA; 11554 MW;
                                                  DETERMINATION OF AMIDATION STATES OF 58; 59; 62; MEDLINE=78187254; PubMed=418802; Gavish M., Zakut R., Wilchek M., Givol D.; "Preparation of a semisynthetic antibody."; Biochemistry 17:1345-1351(1978).
-i- MISCELLANEOUS: This chain is from a myeloma
                                                                                                                                                                                                                                                     SEQUENCE OF 20-129.
MEDLINE=74048693; PubMed=4760498;
Dugan B.S., Bradshaw R.A., Simms E
"Amino acid sequence of the light
                                                                                                                                                                                                                                                                                                                                                              Schechter I., Wolf O., Zemell R., Burstein "Structure and function of immunoglobulin gred. Proc. 38:1839-1845(1979).
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nature 298:380-382(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Baltimore D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=82220143; PubMed=6283385;
Bothwell A.L.M., Paskind M., Reth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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MEDLINE=82774221; PubMed=6287422;

Wu G.E., Govindji N., Hozumi N., Muria
"Nucleotide sequence of a chromosomal
immunoglobulin gene of mouse.";
Nucleic Acids Res. 10:3831-3843(1982).
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Mammalia; Eutheria; Rodentia;
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InterPro; IPR003596;
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E O., Zemell R.,
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Pfam; PF00047; ig; 1.
SMART; SM00406; IGv;
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SMART; SM00406; IGv; 1.
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HSSP; P01724; 1A6V.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=79084170; PubMed=103630;
Bernard O., Hozumi N., Tonegawa S.;
"Sequences of mouse immunoglobulin light
                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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P01723;
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between the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                     somatic changes.";
Cell 15:1133-1144(1978).
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01-OCT-2004 (Rel. 45, Last annotation
Ig lambda-1 chain v region precursor.
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88.2%;
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Ig_v.
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Immunoglobulin V region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6,
  Score 487;
                                          Ig lambda-1
Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 514;
Pred. No. 0
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Ig-like.
Pyrrolidone carboxylic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                     36F3C5601C54B55A
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 ۲,
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Length 117;
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MBL outstation -
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Best Local Similarity Matches 94; Conser

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Pred. No. 3.3e 0; Mismatches

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Best Local &
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EMBL; V00815; CAA24196.2; --
EMBL; X58412; CAA41313.1; --
EMBL; X58418; CAA41318.1; --
EMBL; X58423; CAA41323.1; --
EMBL; X58424; CAA41324.1; --
EMBL; X58424; CAA41344.1; --
EMBL; X58424; --
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the European Bioinformatics Institute. The use by non-profit institutions as not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00047; 1g; 1.
SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Sequence of a mouse germ-line gene immunoglobulin light chain."; Proc. Natl. Acad. Sci. U.S.A. 75:14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia; MCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                           NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
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InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        between the Swiss Institute of Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=78179064; PubMed=418414;
Tonegawa S., Maxam A.M., Tizard R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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21-JUL-1986
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bulin V region; Signal.
                                                PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHW
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117
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89.8%;
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Pred. No. 1
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Ig-like.
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                                                                                                                                                                                                                                                                                                                                                                        43FDF197419B42A6 CRC64;
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                                                                                                                                                                                                                                   Db
..5e-37;
7;
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variable
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RESULT 12
LV6C_HUMAN
ID LV6C_HUMAN
AC P06317;
DT 01-JAN-1988
                                                                                                                                                                                                                                                                                            Matches
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Best Local
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NON TER
SEQUENCE
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01-JAN-1988 (Rel. 06, Last s
01-OCT-2004 (Rel. 45, Last a
Ig lambda chain V-VI region
"Light chain variable
                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
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GO; GO:0003823; F:antigen binding; NAS.
GO; GO:0005955; F:immune response; NAS.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=85014122; PubMed=6091030;
Anderson M.L.M., Szajnert M.F., Kaplan J.C., McColl L., Young B.D.;
With isolation of a human Ig V lambda gene from a recombinant library
of chromosome 22 and estimation of its copy number.";
Nucleic Acids Res. 12:6647-6661(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HUMAN
                      SEQUENCE
                                                                            Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSSP; P01724; 1A6V
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15-UUL-1999 (Rel. 38, Last annotation update)
Ig lambda chain V region 4A precursor.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunoglobulin
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                                                                                                                                                                                                    PARFSGSLLGGKAALTLSGVQPEDEAEYYCLLYY 114
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IG LIKE;
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Primates;
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                                                                                                                                                                                                                                                                                                                                                                                                                             Ig lambda c
Framework-1
                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                             PRT;
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InterPro; IPROVULI
Pfam; PRO0047; 19; 1.
SMART; SM00406; IGV; 1.
SMART; SM00406; IGV; 1.
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Amyloidosis, pp. 449-462, Plenum
PIR; A01988; L6HUST.
PDB; 1CD0; X-ray; A/B=1-111.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
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TISSUE=Lymphocyte;
                                                         01-OCT-2000 (TrEMBLrel 15, Created)
01-OCT-2000 (TrEMBLrel 15, Last sequence update)
01-MAR-2004 (TrEMBLrel 26, Last annotation update)
Homo sapiens This CDS feature is included to show the corresponding V_region. Presently translation of V_region features are illegal. (Fragment)
Homo sapiens (Human)
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Mammalia; Eutheria; Primates;
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                                                                                                                                                                       RFSGSIDRSSNSASLTISGLQTEDEADYYCQSYDRDHWVFGGGTKLTVLG 111
                                                                                                                                                                                                                                          42.4%; Score 244.5; larity 46.4%; Pred. No. 2.6; Conservative 19; Mismatches
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Zucker-Franklin
                                                                                                                              PRELIMINARY;
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Franklin D. (ed
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Complementarity-determining-3
Framework-4.
By similarity.
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                                       Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                            0941DD547D983598 CRC64;
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RX Strausberg R.L., Feingold B.A., Grouse I.H., Derge J.G.,

RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RX Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

RX Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RX Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RX Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RX Altschul S.F., Zeeberg B., Buetow K.H., Wang J., Heich F.,

RX Altschul S.F., Jordan H., Woore T., Max., Rubin G.M., Hong L.,

RX Altschul S.F., Jordan H., Woore T., Max., Rubin G.M., Hong L.,

RX Stapleton M., J. Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RX Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RX Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RX Alass., L., Morguellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RX BDIAKERS, Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RX Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RX Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RX William D.K., Madan A., Young A.C., Shevchenko Y., Butfard G.G.,

RX Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

RX RYWINSKI M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

RX Jones S.J., Marra M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                Jones S.J., Marra M.A.,
Jones S.J., Marra M.A.,
"Generation and initial analysis of more
and mouse cDNA sequences.",
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004
05-JUL-2004
05-JUL-2004
                                                   InterPro;
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                                                                                                                                                            EMBL;
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Mammalia; Eutheria;
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InterPro; IPR003596; Ig_v.
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; IPR003599; Ig.
;; IPR007110; Ig-like.
;; IPR003597; Ig C1.
;; IPR0030597; Ig MHC.
;; IPR0030596; Ig MHC.
;; IPR003596; Ig v.
;07654; C1-set; I.
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15; Mismatches
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Best Local S
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Best Local S
Matches 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GO; GO:0005576; C:extracellular; NAS.
GO; GO:000576; C:extracellular; NAS.
GO; GO:0006955; F:antigen binding; NAS.
GO; GO:0006955; F:immune response; NAS.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; Ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00047; ig; 2.
SMART; SM00409; IG; 2.
SMART; SM00407; IGC1; 1.
SMART; SM00406; IGV; 1.
PROSITE; PS00329; IG_MHC; UNKNOWN_1.
Hypothetical protein.
SEQUENCE 236 AA; 24950 MW; 3B0477247847E930 CRC64;
                                                                                                                                                                                                                                                                              MOD RES
DISULPID
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE.

MEDLINE-75115478; PubMed=804002;

KOhler H., Rudofsky S., Kluskens L.;

Withe primary structure of a human lambda II chain.";

J. Immunol. 114:415-421(1975).

-!- MISCELLANEOUS: The C region of this chain has the OZ+ marker.

-!- MISCELLANEOUS: This chain was isolated from a myeloma protein.

-!- SIMILARITY: Contains 1 immunoglobulin-like domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

NCBI_TaxID=9606;

[1]
                                                                                                                                                                                                                                                                                                                                                                                     Direct protein sequencing; In Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P01706;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Ig lambda chain V-II region BOH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PIR; A01972; L2HUBH.
HSSP; P01709; 2MCG.
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     61
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52; Conserv
                                                                                                                                                               h 41.1%; Score 236.5; DB 1; Similarity 44.1%; Pred. No. 1.6e-15; 49; Conservative 21; Mismatches 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
  PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNH-WVFGGGTKLTVLG 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PERPSGSKSGPSASLVISGLQSEDEAEYYCAAWDDSLDGPYVFGTGTKVTVLG 131
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                                                                                                                                                                                                                                                                              111 AA;
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Pyrrolidone carboxylic acid.
By similarity.
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PYRFSGSKSGNTASLTISGLQAEDEAHYYCCSYAGRFTWVFGGGTNLTVLG

Search completed: December 29, 2004, 18:05:20 Job time: 77.9292 secs

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Result
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Gapop 10.0 ,
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1: pir1:*
2: pir2:*
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Compugen
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Ig lambda chain V
pelB leader/Ig hea
Ig lambda-1 chain V
Ig lambda chain Ig lambda chain V
                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                     PC4402
pclB leader/Ig heavy chain anti-NP/linker type 205/alkaline phosphatase fusion protei C;Species: synthetic
C;Species: 66-Nov-1998 #sequence_revision 06-Nov-1998 #text_change 06-Nov-1998
C;Accession: PC4402
R;Suzuki, C; Udab, H; Suzuki, E; Nagamune, T.
J. Biochem. 122, 322-329, 1997
A;Title: Construction, backerial expression, and characterization of hapten-specific
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                                                C; Keywords: fusion protein
                                                              A; Molecule type: DNA
A; Residues: 1-287 <SUZ>
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                                                                                      A; Accession: PC4402
                                                                                               A; Reference number: PC4402
  Query Match 96.
Best Local Similarity 97.
Matches 106; Conservative
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| 2 | •      | 238.5  | 239.5  | 240    | 240    | 241    | 243.5  | 244.5  | 37 244.5 42.4 | 246.5  | 247.5      | 250    | 277    | 279    | . 279  | 280.5  |
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|   | 108    | 233    | 233    | 217    | 213    | 149    | 109    | 216    | 111           | 110    | 108        | 98     | 98     | 117    | 117    | 110    |
|   | N      | N      | N      | N      | N      | N      | N      | N      | Н             | N      | N          | N      | N      | N      | _      | N      |
|   | S47184 | S25752 | S25744 | JE0246 | S21066 | S23626 | S19663 | A42193 | L6HUST        | S57442 | S38498     | S36063 | S36062 | S04526 | LVHU2  | S57465 |
| ٠ | Ig     | Ig     | PI 19  | Ig     | 1g     | Ig     | 1g     | Ig     | Ig            | PI     | <b>E</b> I | ΡI     | Ig     | БI     | Ig     | Ig     |
|   | lambda        | lambda | lambda     | lambda | lambda | lambda | lambda | lambda |
|   | chain  | chain  | chain  | chain  | chain  |        |        |        | chain         |        |            |        |        |        |        | chain  |
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ALIGNMENTS

#### RESULT 1 S52450 Ig lambda chain V region - mouse Ig lambda chain V region - mouse C;Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Ante: 08-May-1995 #sequence\_revision 21-Jul-1995 #text\_change 21-Jan-2000 C;Accession: S52450 R;Berdoz, J; Krachenbuhl, J.P. R;Berdoz, J; Krachenbuhl, Kra A;Introns: 16/1 C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin F;34-111/Domain: immunoglobulin homology <IMM> A; Molecule type: DNA A; Residues: 1-128 <BER> C; Genetics: A;Cross-references: EMBL:X82687; NID:g673448; PIDN:CAA58008.1; PID:g673449 A; Status: preliminary Query Match Best Local ( Matches 106; 20 **,** Similarity Conservative 96.0%; Score 553; DB 2; Pred. No. 1.5e-41; 0; Mismatches 3 υ • Length 128; homology Indels reaction of rearranged 0, Gaps 79 60 0

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96.0%; 97.2%;

Score 553; DB 4; Pred. No. 3.4e-41; 0; Mismatches 3

Length 287;

Indels

0

Gaps

0

protein

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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-43,'T','45-50,'G',52-58,'E',60-89,'D',91-129 <BER>
A;Note: the sequence was determined from the differentiated gene
R;Bothwell, A.L.M.; Paskind, M.; Reth, M.; Imanishi-Kari, T.; Rajewsky,
Nature 298, 380-382, 1982
A;Title: Somatic variants of murine immunoglobulin lambda light chains.
A;Reference number: A33282; MUID:82220143; PMID:6283385
                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: protein
A;Residues: 20-43,'N',45-70,'N',72-115,'R',117-129 <CB3>
A;Residues: 20-43,'N',45-70,'N',72-115,'R',117-129 <CB3>
A;Note: these proteins were isolated from serum or urine of t
R;Bernard, O.; Hozumi, N.; Tonegawa, S.
cell 15, 1133-1144, 1978
A;Title: Sequences of mouse immunoglobulin light chain genes
A;Reference number: A90780; MUID:79084170; PMID:103630
A;Contents: H2020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Note: compositions and partial sequences of RPC 20 shor;Cesari, I.M.; Weigert, M.

Proc. Natl. Acad. Sci. U.S.A. 70, 2112-2116, 1973
A;Title: Mouse lambda-chain sequences.
A;Reference number: A93784; MUID:73229669; PMID:4516208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d after synthesis R,Appella, E, R,Appella, E, Proc. Natl. Acad. Sci. U.S.A. 68, 590-594, A,Title: Amino acid sequences of two mouse A;Reference number: A93775; MUID:71107854; A,Contents: MOPC 1048; RPC 20
                                                                                                                                                                                                                                                                                                                                            A; Accession: A90780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Accession: C93784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: protein A; Residues: 20-129 < CE2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Reference number: A937
A;Contents: J558; S104;
A;Accession: A93784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Accession: B93775
A;Molecule type: protein
A;Residues: 'Z',21-25,'Q',27-129
A;Accession: C93775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: protein A; Residues: 20-129 < AP2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 74, 716-720, 1977
A;Title: Amino acid sequence of the NH-2-terminal extra piece segments
A;Reference number: A93815; MUID:77148916; PMID:403522
A;Contents: MOPC 104E
A;Accession. Docor-
.Molecule type: DNA
.;Residues: 1-58,'E',60-89,'D',91-98,'T',100-105,'M',107-129 <BOT>
.;Note: the sequence was determined from the differentiated gene
;;Comment: The MOPC 104E sequence is shown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Mus musculus (house mouse)
C;Date: 24-Sep-1981 #sequence revision 24-Sep-1981 #text change 09-Jul-2004
C;Accession: B93815; B93775; C93775; A93784; B93784; C93784; A90780; C93282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Note: this precursor was
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A; Residues: 1-29 < BUR>
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PMID:5276767
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S178, H2020,
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                                                                                                                                                                                                                                                                                                                                                                                                     after somatic
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                                                                                                                                                                                                                           Baltimore,
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R;Miller III, A.; Glasel, J.A.
J. Mol. Biol. 209, 763-778, 1989
A;Title: Comparative sequence and immunochemical analyses
A;Reference number: S06815; MUID:90064531; PMID:2555519
A;Accession: S06818
                                                                                                                                                                                                                                               Ig lambda chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 30-Jun-1992 #sequence_revision
           A; Molecule type: mRNA
A; Residues: 1-112 < MIL>
C; Superfamily: immunoglo
C; Keywords: heterotetran
                                                                                        A; Status: not compared with conceptual translation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene 169, 237-239, 1996
A;Title: Cloning and characterization of cDNAs coding for heavy and light chains A;Reference number: PC4155; MUID:96194809; PMID:8647454
A;Accession: PC4156
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R;Kwak, J.W.; Choi, B.K.
Gene 169, 237-239, 1996
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A;Introns: 16/1
A;Introns: 16/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (k-C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (k-C;Complex: An immunoglobulin v seme cases, such as IgA and IgM, the subunits associate into 1 C;Superfamily: immunoglobulin v region; immunoglobulin homology
C;Superfamily: introduced propolitamic acid
C;Superfamily: heterotetramer; pyroglutamic acid
F;1-19/Domain: signal sequence #status acid
F;1-19/Domain: signal sequence #status precursor v region #status experimental <MAT>
F;20-129/Domain: immunoglobulin homology <IMM>
F;34-111/Domain: immunoglobulin homology <IMM>
F;34-111/Domain: immunoglobulin homology <IMM>
F;34-111/Domain: #status pyrolidone carboxylic acid (Gln) (in mature form) #status experime
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A; Residues: 1-214 < KWA>
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C;Species: Mus musculus (house mouse)
C;Date: 10-May-1996 #sequence_revision 19-Jul-1996 #text_change
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Ig lambda chain
;Superfamily: immunoglobulin V region; imm;
;Keywords: heterotetramer; immunoglobulin
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Best Local (
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95.5%;
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Pred. No. 1e-40;
2; Mismatches
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Pred. No. 2.3e-41;
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                                                                                                                                                           monoclonal anti-morp
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F;15-92/Domain:

immunoglobulin homology <IMM>

B. ¥

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Ig lambda chain V region - mouse C;Species: Mus musculus (house mouse) C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #tf C;Accession: $20654
R;Losman, M.; Fasy, T.M.; Novick, K.E.; Monestier, M. submitted to the EMBL Data Library, February 1992
A;Bescription: Relationships among antinuclear antibod A;Reference number: $20639
A;Accession: $20639
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S20654
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(;Species: Mus musculus (house mouse)
(;Species: Mus musculus (house mouse)
(;Date: 30-Jun-1992 #sequence_revision 11-Nov-1994 #text_change 21-Jan-2000
(;Accession: S06819
R;Miller III, A.; Glasel, J.A.
J. Mol. Biol. 209, 763-778, 1989
A;Title: Comparative sequence and immunochemical analyses of murine monoclonal anti-morp A;Reference number: S06815; MUID:90064531; PMID:2555519
A;Accession: S06819
                                                                                                                                               A;Cross-references: EMBL:x65012; NID:g52705; PIDN:CAA46145.1; PC;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;15-92/Domain: immunoglobulin homology <IMM>
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A; Residues: 1-106 < LOS>
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A; Residues: 1-113 <MIL>
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Best Local S
Matches 103
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Best Local S
Matches 104
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                                                                                               Local Similarity
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ARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL 109
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                                                                                             90.6%; Score 522; DB 2;
94.3%; Pred. No. 6.4e-39;
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Pred. No. 4.4e-40;
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A; Residues: 1-114 < MIL>
A; Cross-references: EMBL: X17169
                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Comparative sequence and immunochemical analyses A;Reference number: S06815; MUID:90064531; PMID:2555519 A;Accession: S06820
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A;Note: the Se155-4 hybridoma is specific for the 3,6-dideoxy-D-galactose epitope of C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin f;15-92/Domain: immunoglobulin homology <IMM>
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A;Accession: B54256
A;Molecular recognition of a Salmonella trisaccharide epitope by monoclonal A;Accession: B54256
A;Molecular type: protein A;Residues: 1-113 <BUN>
A;Experimental source: Se155-4 hybridoma, BALB/c mouse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Miller III, A.; Glasel, J.A.
J. Mol. Biol. 209, 763-778, 1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ig lambda chain V region (clone 12D4) - C;Species: Mus musculus (house mouse)
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                                                                                   AVVTQESIXLTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                         AVVTQES-ALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV 60
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Pred. No. 6.8e-39;
3; Mismatches 8;
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Pred. No. 9.2e
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RESULT L2MS35

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A;Molecule type: protein
A;Residues: 110-126 <BOG>
C;Comment: This chain is from a myeloma protein with anti-DNP activity.
C;Comment: This chain is from a myeloma protein with anti-DNP activity.
C;Comment: This chain is from a myeloma protein with anti-DNP activity.
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Koywords: heterotetramer; pyroglutamic acid
C
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A; Residues: 20-24, 'E', 26-73, 'D', 75-129 < DUG>
R; Gavish, M.; Zakut, R.; Wilchek, M.; Givol, D.
Biochemistry 17, 1345-1351, 1978
A; Fittle: Preparation of a semisynthetic antibody.
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C;Species: Mu
C;Date: 31-Ma
C;Accession:
C;Accession:
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EMBO J. 8, 1947-1952, 1989
A;Title: Minimum length of an idiotypic peptide
A;Reference number: S09391; MUID:90005397; PMID:
A;Accession: S09391
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A;Accession: B91462
A;Molecule type: protein
A;Residues: 1-22 <SCH>
R;Dugan, E.S.; Bradshaw, R.A.; Simms, E.S.; Eisen, H.N.
Biochemistry 12, 5400-5416, 1973
A;Title: Amino acid sequence of the light chain of a mon
A;Reference number: A90372; MUID:74048693; PMID:4760498
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Fed. Proc. 38, 1839-1845, 1979
A;Title: Structure and function of immunoglobulin genes A;Title: Structure A91462; MUID:79148758; PMID:428562
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A;Molecule type: DNA
A;Residues: 1-129 <BOT>
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R;Cross-references: UNIPROT:P01729
R;Bothwell, A.L.M.; Paskind, M.; Reth, M.; Imanishi-Kari,
Nature 298, 380-382, 1982
A;Title: Somatic variants of murine immunoglobulin lambda
A;Reference number: A93282; MUID:82220143; PMID:6283385
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C;Date: 31-Mar-1980 #sequence revision 01-Dec-1995 #text change 09-Jul-2004
C;Accession: A93431; B93282; B91462; A90372; A90410; S09391; A01997
R;Wu, G.E.; Govindji, N.; Hozumi, N.; Murialdo, H.
Nucleic Acide Res. 10, 3831-3843, 1982
A;Title: Nucleotide sequence of a chromosomal rearranged lambda-2 immunoglobulin A;Reference number: A93431; MUID:82274221; PMID:6287422
A;Accession: A93431
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                              PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG
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Pred. No. 3.9e-38;
6; Mismatches 7; Indels
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Ig lambda chain V region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 20-Feb-1995 #sequence revision 01-Dec-1995:
C;Accession: S14582; S14587; $14588
R;Chen, Q; Stenzel-Poore, M.; Rittenberg, M.B.
submitted to the EMBL Data Library, March 1991
A;Description: Natural polyreactive antibodies diff.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-114 <MIL»
C; Superfamily: immunoglobulin V region; imm
C; Keywords: heterotetramer; immunoglobulin
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C:Species: Mus musculus (house mouse)
C:Date: 30-Jun-1992 #sequence_revision 11-Nov-1994 #text_change 21-Jan-2000
C;Accession: S06821
C:Accession: Note 21
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A;Status: not compa
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C;Keywords: heterotetramer; immunoglobulin
F;14-91/Domain: immunoglobulin homology <IMM>
F;21-89/Disulfide bonds: #status predicted
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A;Residues: 1-113 <MIL>
A;Residues: 1-113 <MIL>
A;Cross-references: EMBL;X17170; NID:g52253; PIDN:CAA35048.1; PID:g930174
A;Note: the authors translated the codon AGT for residue 47 as Gly, GTT for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Miller III, A.; Glasel, J.A.
J. Mol. Biol. 209, 763-778, 1989
A;Title: Comparative sequence and immunochemical analyses
A;Reference number: S06815; MUID:90064531; PMID:2555519
A;Accession: S06821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;Keywords:
;15-92/Doma
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Best Local
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                                                                                                                                                                                                                       PARFSGSLIGXKAALTITGAQTEDEDIYFCSLWYSNHLVFGGGTKLTVLG
                                                                                                                                                                                                                                                                                                   AVVTQESAXLTTSPGETVTLTCRSSTGAVTTSNYANWVQQKPDHLFTGLIGGTNNRAPGV
                                                                                                                                                                                                                                                                                                                      AVVTQESA-LITTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        compared with conceptual translation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGVP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARFSGSLIGDKVALTIIGTQTEDEAIYFCALWYSNHLVFGGGTKLTVLG
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                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                  88.8%;
91.8%;
                                                                                                                                                                                                                                                                                                                                                                               Score 511.5;
Pred. No. 5.7e
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 2
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Pred. No. 5.1e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                  Length 114;
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differ

from

Ag-induced antibodies

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Ig lambda chain V region (clone 165.33) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 21-Jan-2000
C;Accession: PH1089
R;Tillman, D.M.; Jou, N.T.; Hill, R.J.; Marion, T.N.
J. Exp. Med. 176, 761-779, 1992
A;Title: Both IgM and IgG anti-DNA antibodies are the products of clonally selective A;Reference number: PH0971; MUID:92381444; PMID:1512540
A;Accession: PH1089
Ig lambda chain V region (clone V-lambda-1) - C;Species: Mus musculus (house mouse) C;Date: 30-Sep-1993 #sequence_revision 30-Sep-C;Accession: PH1090 R;Tillman, D.M.; Jou, N.T.; Hill, R.J.; Marion J. Exp. Med. 176, 761-779, 1992
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A;Accession: S14582
A;Accession: S14582
A;Molecule type: mRNA
A;Residues: 1-99 <CHE>
A;Cross-references: EMBL:X58654; NID:g52911; PIDN:CAA41511.1; PID:g52912
A;Experimental source: isolate PPC-1-54
A;Accession: S14587
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A;Experimental source: isolate PPC-15-30
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-92/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-99 <CH3>
A; Cross-references: EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Experimental source: B cell, strain [NZB x NZW]F1 C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: immunoglobulin
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A;Experimental source: isolate PPC-1-5
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A; Residues: 1-99 <TIL>
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A; Residues: 1-99 < CH2>
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Best Local S
Matches 96
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Similarity 96.0%;
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                                                                                                                                                                                                                                                                                                                                               QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
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                                                                                                                                                                                                                              PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSN-WVF 99
                                                                                                                                                                                                                                                          PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVF 100
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                                                                                                                                                                                                                                                                                                                                                                                                             85.0%; Score 489.5; DB 2; 96.0%; Pred. No. 4.1e-36; tive 0; Mismatches 3;
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Pred. No. 7.4e-37;
0; Mismatches 4
                     R.J.; Marion,
                                                           30-Sep-1993 #text_change
                                                                                                               mouse (fragment)
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A;Title: Both IgM and IgG anti-DNA antibodies are the products of clonally selective A;Reference number: PH0971; MUID:92381444; PMID:1512540 A;Accession: PH1090 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-97 <TIL>
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Matches
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                                                                                                                                                                     Local Similarity
13
                                 61
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                                                                                             1 QAVVTQESALITTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                     PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNH 97
                                                                         QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAPGV
                                                                                                                                                   Conservative
                                                                                                                                                                     84.5%;
96.9%;
                                                                                                                                                 Score 487; DB 2;
Pred. No. 6.6e-36;
0; Mismatches 3
                                                                                                                                                                                                                                                                   immunoglobulin
                                                                                                                                                                                     Length 97;
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Search completed: December 29, 2004, 18:06:57 Job time : 16.2552 secs

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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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seq length: 2000000000
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1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

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9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
        Match Length
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Gapop 10.0 , Gapext 0.5
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576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/2/pubpaa/US09E_PUBCOME.pep:*
/cgn2_6/ptodata/2/pubpaa/US09C_PUBCOME.pep:*
/cgn2_6/ptodata/2/pubpaa/US09S_PUBCOME.pep:*
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOME.pep:*
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                      7 US-10-774-076-5
7 US-10-816-938-21
7 US-10-816-938-21
7 US-10-625-047-1
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                                                      Sequence 5, Appli
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| 45                | 44        | 3                 | 42                 | 11               | 6                  | 39                 | 38               | 37   | 36               | 35                | 34               | ü                | 32                 | 3                  | 30      | 29              | 28           | 27                | 26                | 25             | 24     | 23   | 22            | 21  | 20   | 19      | 18     | 17               | 16      | 15           | 14                |
|-------------------|-----------|-------------------|--------------------|------------------|--------------------|--------------------|------------------|------|------------------|-------------------|------------------|------------------|--------------------|--------------------|---------|-----------------|--------------|-------------------|-------------------|----------------|--------|------|---------------|-----|------|---------|--------|------------------|---------|--------------|-------------------|
| 92                | 292.5     | 92                | 94                 | 300              | 8                  | 303.5              | 309              | 315  | 315.5            | 329               | 329              | 329              | 338                | 338                | 391.5   | 391.5           | 413.5        | 421               | 428               | 469            | 473    | 493  | 494           | 504 | 504  | 508     | 513    | 517              | 519     | 519          | 522               |
| •                 | 50.8      | •                 | 51.1               | 52.1             | •                  | 52.7               | 53.6             | 54.7 | 54.8             | 57.1              | 57.1             | 57.1             | 58.7               | 58.7               | •       | •               | 71.8         | •                 | 74.3              | 81.4           | •      | •    | •             | •   | 87.5 | •       | •      | 89.8             | •       | 90.1         | 90.6              |
| 251               | 251       | 251               | 244                | 84               | 249                | 249                | 216              | 108  | 253              | 108               | 108              | 108              | 245                | 245                | 252     | 252             | 98           | 112               | 100               | 99             | 99     | 218  | 218           | 109 | 109  | 107     | 109    | 109              | 218     | 129          | 391               |
| 10                | 10        |                   |                    |                  |                    |                    |                  | 10   | 14               | 10                | 10               | 10               | 14                 | 10                 | 14      | 9               | 10           | 16                | 10                | 10             | 10     | 16   | 16            | 10  | 10   | 14      | 5      | 10               | 16      | 16           | 14                |
| US-09-880-748-894 | -880-748- | US-09-880-748-890 | US-10-120-414-77 . | US-09-135-238B-5 | US-10-293-418-1838 | US-09-880-748-1838 | US-09-291-299A-8 | -848 | US-10-322-673-54 | US-09-848-798-166 | US-09-848-798-52 | US-09-848-798-51 | US-10-293-418-1523 | US-09-880-748-1523 | -10-169 | US-09-750-424-1 | -09-940-727E | US-10-327-598-809 | US-09-940-727B-96 | -09-940-727B-8 | -09-94 | -10- | -10-379-392-1 |     |      | -10-328 | -727B- | US-09-940-727B-1 | -10-379 | -10-768-193- | US-10-328-190-14  |
| 894               |           | 890               | (D                 | ,<br>A           | _                  | _                  | φ,               | ιn   |                  | _                 | tη               |                  | 152                | <u></u>            | ŭ       | ŗ               | 4            | 00                | ø                 | 8              | ب      | =    | =             | ::  |      | 느       | e<br>2 | e<br>H           | 159     | 8,           | Sequence 14, Appl |

## ALIGNMENTS

US-10-774-076-5

Sequence 5, Application US/10774076 Publication No. US20040210040A1 GENERAL INFORMATION:

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; LENGTH: 110
; TYPE: PRT
; ORGANISM: mus s
US-10-774-076-5
RESULT 2
US-10-816-938-8
; Sequence 8, Application US/10816938
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                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 576; DB 1'Best Local Similarity 100.0%; Pred. No. 4e-46; Matches 110; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OF INVENTION: Psoriasis
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
                                                                                                                  61
                                                                                                                                          61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
                                                                                                                                                                                                                                     1 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV 60
                                                                                                                                                                                                         1 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV
                                                                                                                  PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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RESULT 3
US-10-816-938-21
Sequence 21, Application US/10816938
Publication No. US20040729301A1
GENERAL INFORMATION:
APPLICANT: Wang, Baiyang
TITLE OF INVENTION: Tissue Factor Antibodies and
FILE REFERENCE: 1861.1670002
CURRENT APPLICATION NUMBER: US/10/816,938
CURRENT FILING DATE: 2004-04-05
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin version 3.2
TENTUTE 11:
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US-10-625-047-1
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                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                      Sequence 1, Application US/10625047 Publication No. US20040198962A1
APPLICANT: Meares, Claude
APPLICANT: Meares, Claude
APPLICANT: Corneillie, Todd
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Multi-Functional Antibodies
FILE REFERENCE: 023070-130910US
CURRENT APPLICATION NUMBER: US/10/625,047
CURRENT APPLICATION NUMBER: US/10/625,047
CURRENT FILING DATE: 2003-07-22
PRIOR APPLICATION NUMBER: US 10/350,555
PRIOR FILING DATE: 2003-01-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 112
TYPE: PRT
ORGANISM: Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wang, Baiyang
TITLE OF INVENTION: Tissue Factor Antibodies and Uses Thereof
FILE REFERENCE: 1861.1679002
CURRENT APPLICATION NUMBER: US/10/816,938
CURRENT FILING DATE: 2004-04-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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107; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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97.3%;
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Pred. No. 3.6e-44;
1; Mismatches 3;
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Pred. No. 1.6e-44;
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; Sequence 21, Application US/10625047
; Publication No. US20040198962A1
; GENERAL INFORMATION:
APPLICANT: Meares, Claude
APPLICANT: Meares, Claude
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Multi-Functional Antibodies
FILE REFERENCE: 023070-130910US
; CURRENT APPLICATION NUMBER: US/10/625,047
; CURRENT FILING DATE: 2003-07-22
PRIOR APPLICATION NUMBER: US 10/350,555
; PRIOR FILING DATE: 2003-01-23
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 21
; LENGTH: 109
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                                                                                                                 Sequence 29, Application US/10625047
Publication No. US20040198962A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                             Matches 102;
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                  APPLICANT: Meares, Claude
APPLICANT: Cornellie, Todd
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Multi-Functional Antibodies
FILE REFERENCE: 023070-130910US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver. :
SEQ ID NO 1
CURRENT APPLICATION NUMBER: US/10/625,047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 103;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: murine monoclonal antibody 2D12.5 light chain OTHER INFORMATION: variable domain (VL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Mus musculus FEATURE:
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                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                       62 ARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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93.6%;
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Pred. No. 2.6e-42;
1; Mismatches 6;
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Pred. No. 9e-43;
1; Mismatches
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APPLICANT: Meares, Claude
APPLICANT: Meares, Claude
APPLICANT: Corneillie, Todd
APPLICANT: The Regents of the University of California
ITILE OF INVENTION: Multi-Functional Antibodies
FILE REFERENCE: 023070-130910US
CURRENT APPLICATION NUMBER: US/10/625,047
CURRENT FILING DATE: 2003-07-22
PRIOR APPLICATION NUMBER: US 10/350,555
PRIOR FILING DATE: 2003-01-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 22
LENGTH: 109
                    RESULT 8
US-10-625-047-27
US-10-625-047-27
; Sequence 27, Application US/10625047
; Publication No. US20040198962A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
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Best Local Similarity
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LENGTH: 109
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Best Local Similarity
APPLICANT: Meares, Claude APPLICANT: Corneillie, Todd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 2003-07-22
PRIOR APPLICATION NUMBER: US 10/350,555
PRIOR FILING DATE: 2003-01-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Description of Artificial Sequence:native cloned OTHER INFORMATION: hybridoma murine 2D12.5 light chain variable OTHER INFORMATION: region (VL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence FEATURE:
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1; Mismatches
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Pred. No. 5e-42;
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.6e-42;
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US-10-625-047-23
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APPLICANT: Mearces, Claude; APPLICANT: Corneillie, To
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CURRENT FILING DATE: 2003-07-22
PRIOR APPLICATION NUMBER: US 10/350,555
PRIOR FILING DATE: 2003-01-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Corneillie, Todd

APPLICANT: The Regents of the University of California TITLE OF INVENTION: Multi-Functional Antibodies

FILE REFERENCE: 023070-130910US
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                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence:N53C cloned OTHER INFORMATION: mutant murine 2D12.5 light chain variable regionther INFORMATION: (VL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence:native cloned OTHER INFORMATION: chimeric murine 2D12.5 light chain variable region OTHER INFORMATION: (VL) fused to human anti-tetanus toxin antibody OTHER INFORMATION: kappa light chain constant region (TTCL)
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                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 109
TYPE: PRT
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                                                                                                                                                                                   Local Similarity
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                                      62 ARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVL
                                                                                                                       2 AVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGVP 61
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Similarity 94.4%;
                                                                            AVVTQESALITISPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGCNNRPPGVP
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                                                                                                                                                                                 92.2%; Score 531; DB 17; 94.4%; Pred. No. 6.2e-42;
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Pred. No. 1e-41;
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US-10-625-047-28

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GENERAL INFORMATION:

APPLICANT: Meares, Claude

APPLICANT: Corneillie, Todd

APPLICANT: The Regents of the University of California

ITILE OF INVENTION: Multi-Functional Antibodies

FILE REFERENCE: 023070-139310US

CURRENT APPLICATION NUMBER: US/10/625,047

CURRENT FILING DATE: 2003-07-22

PRIOR APPLICATION NUMBER: US/350,555

PRIOR APPLICATION NUMBER: US/10/350,555

PRIOR FILING DATE: 2003-01-23

NUMBER OF SEQ ID NOS: 72

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 28

LENGTH: 218
RESULT 12
US-10-726-555-7
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US-09-865-483-7
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US-09-865-483-7
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Best Local Sim
Matches 102;
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SEQ ID NO 7
LENGTH: 109
TYPE: PRT
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APPLICANT: LEE, JONG WOOK et al.
APPLICANT: LEE, JONG WOOK et al.
TITLE OF INVENTION: A VARIABLE REGION OF THE MONOCLONAL ANTIBODY AGAINST THE HBV S-SU
TITLE OF INVENTION: ANTIGEN AND A GENE ENCODING THE SAME
FILE REFERENCE: 1599-0197P
CURRENT APPLICATION UNMBER: US/09/865,483
CURRENT FILLING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 14
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Best Local :
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Patent No. US20020061581A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence:NE3C cloned OTHER INFORMATION: mutant chimeric murine 2D12.5 light chain variable OTHER INFORMATION: region (VL) fused to human anti-tetanus toxin OTHER INFORMATION: antibody kappa light chain constant region (TTCL)
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ORGANISM: Artificial Sequence
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Pred. No. 6.9e-42;
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Pred. No. 1.3e-41;
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SEQ ID NO 4
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GENERAL INFORMATION:

APPLICANT: LEE, JONG WOCK et al.

APPLICANT: LEE, JONG WOCK et al.

TITLE OF INVENTION: A VARIABLE REGION OF THE MONOCLONAL ANTIBODY AGAINST THE HBV S-ST

TITLE OF INVENTION: ANTIGEN AND A GENE ENCODING THE SAME

FILE REFERENCE: 1599-0197P

CURRENT APPLICATION NUMBER: US/10/726,555

CURRENT FILING DATE: 2003-12-04

PRIOR APPLICATION NUMBER: US/09/865,483

PRIOR PILING DATE: 2010-05-29

NUMBER OF SEQ ID NOS: 14

SOFTWARE: Patentin version 3.1

SEQ ID NO 7

**TOTALL SEQ ID NOS 14

SEQ ID NO 7

**TOTAL SEQ ID
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Best Local Similarity
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CURRENT FILLING DATE: 2002-11-27
PRIOR APPLICATION NUMBER: 60/333,479
PRIOR FILING DATE: 2001-11-28
NUMBER OF SEQ ID NOS: 12
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Best Local :
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APPLICANT: HANSEN, HANS J.
APPLICANT: GOVINDAN, SERENGULAM
APPLICANT: LOSMAN, MICHELLE
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Publication No. US20040191259A1
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ORGANISM: Artificial Sequence
FEATURE:
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   61
                               63 RFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                      VVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKDDHLFTGLIGGTINRVPGVPA
                                                                                                                               VVTQESALTTSPGETVTLTCRSSSGAVTTNNYANWVQEKPDHLFTGLIGGTNNRAPGVPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PARFSGSLIGDKAALTITGAQTEDEAIYFCALWY-NNWVFGGGTKLTVLG 109
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Description of Artificial Sequence: Synthetic LGIVL amino acid sequence
                                                                                                                                                                                                                                                                                                     92.0%;
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Pred. No. 7.6e-42;
5; Mismatches 3;
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Pred. No. 6.9e-42;
3; Mismatches 3
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108
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Sequence 14, Application US/10328190 Publication No. US20030162709A1

GENERAL INFORMATION:

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; TYPE: PRT
; ORGANISM: Mus musculus
US-10-768-193-8
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US-10-768-193-8
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APPLICANT: CHANG, CHIEN-RING KEN
APPLICANT: CHANG, CHIEN-RING KEN
APPLICANT: CHANG, CHIENDRING MUITISPECIFIC, MULTIVALENT AGENTS
TITLE OF INVENTION: METHODS OF GENERATING MULTISPECIFIC, MULTIVALENT AGENTS
TITLE OF INVENTION: FROM VH AND VL DOMAINS
FILE REFERENCE: 042418/0115
CURRENT APPLICATION NUMBER: US/10/328,190
CURRENT FILING DATE: 2003-04-03
PRIOR APPLICATION NUMBER: 60/342,103
PRIOR APPLICATION NUMBER: 60/342,103
PRIOR FILING DATE: 2001-12-26
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 14
LENGTH: 391
                                                                                                                                                      Query Match 90.1%; Score 519; DB 16; Length 129; Best Local Similarity 90.0%; Pred. No. 9.7e-41; Matches 99; Conservative 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8, Application US/10768193 Publication No. US20040181042A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2002-08-01
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: P0102402
CURRENT APPLICATION NUMBER: US/10/768,193
CURRENT FILING DATE: 2004-02-02
PRIOR APPLICATION NUMBER: JP P2001-235700
PRIOR FILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: PCT/JF02/07874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Amtibody recognizing GM1 ganglioside-bound TITLE OF INVENTION: amyloid b-protein and DNA encoding the antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: MEDICAL & BIOLOGICAL LABORATORIES CO., LTD APPLICANT: The director of Chubu National Hospital APPLICANT: YANAGISAWA, Katsuhiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 391
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Protein
OTHER INFORMATION: sequence for VL-chain of TS1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 90.6%; Score 522; DB 14; Length 391; Local Similarity 90.0%; Pred. No. 1.7e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    212 PARFSGSLIGDKAALTITGAQTEDEAIYFCVLWYSDRWVFGGGAKLTVLG 261
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61 PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLG 110
                                                                                1 QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNSANWVQEKPDHLFTGLIGGTINRVPGV 60
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                                                  QAVVTQESALTTSPGGTVILTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTSNRAPGV 79
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80 PVRFSGSLIGDKAALTITGAQTEDDAMYFCALWYSTHYVFGGGTKVTVLG 129

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Search completed: December 29, 2004, 18:42:00 Job time : 64.5988 secs

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Result
No.
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Maximum Match 100%
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Maximum DB seq length: 2000000000
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2004 Compugen Ltd.
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| 3.0                | 3.1                | 3.1                | 3.2                | 3.2      | 3.2                | :<br>:   | ۵.                 | ٠.<br>4.           | ٠.<br>5            | 3.6      | 3.6                | 9                  | 9        | 3.9                | .2                 | 4.4                | 5        | . 8      | 4.9                | 5.0                | 5.0          | 5.0      | 5.4                | 6.0        | 6.0      | 6.0      | 6.2      | 7.0      | 1.2      | 9.3                | :     | Ç,ğ         |
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| 143                | 489 :              | 146 :              | 488                | 145      | 141 :              | 142 :    | 145                | 143 :              | 143 ;              | 142 :    | 140 :              | 473                | 145 :    | 145 3              | 124 :              | 146 :              | 145      | 136 ;    | 140                | 145                | 139 :        | 118 ;    | 120                | 465        | 465      | 139 ;    | 614      | 473 2    | 109 ;    | 468                |       | Length DB   |
| 2 Q924R0           | 2 Q8VCX4           | 2 Q924Q3           | 2 Q91WR1           | 2 Q924R3 | 2 Q924Q4           | 2 Q924Q2 | 2 Q924R4           | 2 Q91V67           | 2 Q924P9           | 2 Q924Q1 | 2 Q924R2           | 2 Q99L25           | 2 Q924Q9 | 2 Q924Q6           | 2 Q9UL92           | 2 Q924R8           | 2 Q924R1 | 2 Q7TPE3 | L HV02 MOUSE       | 2 Q924Q7           | L HV07_MOUSE | 2 Q9Z1C4 | L HV03 MOUSE       | 2 AAH18280 | 2 Q6PJB2 | 2 Q924R5 | 2 Q7TMT6 | 2 Q9D8L4 | 2 Q9JL85 | 2 Q99L31           |       | 3 ID        |
| Q924r0 mus musculu | Q8vcx4 mus musculu | Q924q3 mus musculu | Q91wr1 mus musculu | Bru      | Q924q4 mus musculu | mus      | Q924r4 mus musculu | Q91v67 mus musculu | Q924p9 mus musculu | mus      | Q924r2 mus musculu | Q99125 mus musculu | Britte   | Q924q6 mus musculu | Q9u192 homo sapien | Q924r8 mus musculu | Bru      | mus      | P01746 mus musculu | Q924q7 mus musculu | Brown        | mus      | P01747 mus musculu | 80 m       | mue      | Bum      | Bum      |          | Bru      | Q99131 mus musculu |       | Description |
| _                  | _                  |                    |                    |          |                    |          |                    |                    |                    |          |                    |                    |          |                    |                    |                    |          |          | •                  |                    |              |          |                    |            |          |          |          |          |          |                    |       |             |
| DR                 | 맜                  | 뮸                  | DR                 | DR       | DR                 | DR       | DR                 | DR                 | DR                 | 뮸        | RĽ                 | ₽Ā                 | RC       | R                  | RP                 | R                  | P.       | RT       | RT                 | ₽,                 | ₽<br>A       | ŖΑ       | R.                 | ₽          | ₽        | ₽        | Ŗ        | ₽        | RΑ       | ŖΑ                 | ₽     | <b>R</b> 8  |
| PROSI              | SMART              | Pfam;              | Pfam;              | Inter    | Inter              | Inter    | Inter              | PDB;               | PDB;               | EMBL;    | Submi              | Strau              | TISSU    | STRAI              | SEQUE              | [2]                | Proc.    | and n    | "Gene              | Jones              | Krzy         | Rodri    | Blake              | Whiti      | Fahey    | Villa    | Richa    | Bosak    | Raha     | Brown              | Stapl | Hopki       |

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| 145 2 Q924F/ 482 2 Q9K172 481 2 Q91WT1 137 2 Q924R6 146 2 Q924Q8 472 2 QAPA18535 144 2 Q924P5 144 2 QAPA19337 143 2 Q924R7 463 2 Q924R7 463 2 Q991C4 460 2 AAH65733 613 2 Q8VCX7  | 383    |
| 2 Q924F/<br>2 Q98KT1<br>2 Q91WT1<br>2 Q924R6<br>2 Q924Q8<br>2 Q6PJA7<br>2 AAH18535<br>2 Q924P5<br>2 AAH19337<br>2 AAH19337<br>2 Q924R7<br>2 Q924R7<br>2 Q926F733  | 62.1   |
| Q924P/<br>Q8K172<br>Q91WT1<br>Q924R6<br>Q924Q8<br>Q6PJA7<br>AAH18535<br>Q924P5<br>AAH19337<br>Q924R7<br>Q924R7<br>Q991C4<br>Q6P089<br>AAH65733  | 613    |
| ·   | N      |
| Q924pf mur<br>Q8k17z mur<br>Q91wt1 mur<br>Q924r6 mur<br>Q924gf mur<br>Q6pja7 mur<br>Q6pja7 mur<br>Aah18535 I<br>Q924r7 mur<br>Q924r7 mur<br>Q991c4 mur<br>Q6p089 hor<br>Aah65073 mur  | Q8VCX7 |
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# ALIGNMENTS

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| PDB; 2AP2; X-ray; H=  PDB; 2AP2; X-ray; B/D=20-139.  InterPro; IPR007110; Ig-11ke.  InterPro; IPR003597; Ig_c1.  InterPro; IPR003596; Ig_MHC.  InterPro; IPR003596; Ig_MHC.  InterPro; IPR003596; Ig_M.  Pfam; PF07654; C1-set; 3.  Pfam; PF0047; ig; 1.  PMART; SM00406; IGv; 1.  PROSITE; PS50835; IG_LIKE; 4. | National Incardance In | gmer L ow K. H ow K. H ow K. H Ido M. F. Ido M. Id | 199131 PRELIMINARY; PRT; 468 AA. 199131; 1-JUN-2001 (TrEMBLrel. 17, Created) 1-JUN-2001 (TrEMBLrel. 26, Last sequence update) 1-MR-2004 (TrEMBLrel. 26, Last annotation update) 1-MR-2004 (TrEMBLrel. 26, Last annotation update) 1-MR-2004 (Mouse). 1-MR-2004 (Mouse). 1-MR-2004; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi 1-MR-2004; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; |

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RESULT
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01-OCT-2000
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EMBL; AF206021; AAF69319.1; -.

HSSP; Q99131; ZAP2.

InterPro; IPR007110; Ig-like.

InterPro; IPR003596; Ig_v.

Pfam. DF00477. ig.
                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                         PROSITE; PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                   Anti-myosin (Fragment).
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Hypothetical protein.
SEQUENCE 468 AA; 51661 MW; 96352
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; SM00406; IGv; 1.
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                                                             TMTADTSSNTAYLQLSSLTSEDTAVYYCY-GGTITFAYMGQGTLVTVSA
                                                                                               AELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEYAPNFQGRA
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109 ‡
  (TrEMBLrel.
                          PRELIMINARY;
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                                                                                                                                       Conservative
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(TrEMBLrel. 15, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
immunoglobulin heavy chain variable reg
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iilarity 78.5%;
Conservative 1
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Rodentia;
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76.1%;
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Last sequ
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Pred. No. 5.
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Pred. No. 2.
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Sciurognathi; Muridae;
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sequence update
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Mismatches
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RP SEQUENCE FROM N.A.

RR STRAIN-C57BL/61; TISSUE-Pancreas;

RA Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,

RA Adachi J., Aizawa K., Akahira S., Fukunishi Y., Furuno M.,

RA Arakawa T., Bono H., Carninci P., Pukuda S., Fukunishi Y., Furuno M.,

RA Arakawa T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,

RA Hanagaki T., Hara A., Hayatsu N., Kiramoto K., Hiraoka T., Kato H.,

RA Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,

RA Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,

RA Kawai J., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,

Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,

AN Okazaki D., Shibata X., Shibata Y., Shinagawa A., Shiraki T.,

RA Sano H., Sasaki D., Shibata X., Shibata Y., Shinagawa A., Shiraki T.,

Tejima Y., Toya T., Yamamura T., Yasunishi A., Yoshida K., Yoshino M.,

AN Muramatsu M., Hayashizaki Y.,

AN Muramatsu M., Hayashizaki Y.,

BA Muramatsu M., Hayashizaki Y.,

BA Muramatsu M., Bab25349.1; -.

REMEL; AKOO7918; BAB25349.1; -.

REMEL; R1165, PH1165.

REMEL; S26746; S26746.
                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-C57BL/6J; TISSUE-Pancreas;
MEDLINE=20530913; PubMed-11076861;
Shibata K., Itch M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,
Shibata K., Itch M., Nishi K., Kitsunai T., Tashiro H., Itch M.,
Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
Yamimoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
Yujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watchiki M.,
Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,
"RIKEN integrated sequence analysis (RIGA) system-384-format
sequencing pipeline with 384 multicapillary sequencer.";
Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE=Pancreas;
STRAIN-C57BL/6J; TISSUE=Pancreas;
MEDLINE=20499374; PubMed=11042159;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibat Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected prepare full-length cDNA libraries for rapid discovery genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation 60,770 full-length cDNAs."; Nature 420:563-573(2002).
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SEQUENCE FROM N.A.
STRAIN=CS7BL/S0; TISSUB=Pancreas;
MEDLINE=99279253; PubMed=10349636;
Carrinci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.
Meth. Enzymol. 303:19-44(1999).
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STRAIN=C57BL/6J; TISSUE=Pancreas;
The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Functional annotation of Nature 409:685-690(2001).
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STRAIN=C57BL/6J; TISSUE=Pancreas;
MEDLINE=21085660; PubMed=11217851;
RIKEN FANTOM Consortium;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Mus musculus 10 day old male pancreas cDNA, RIKEN full-length enriched
library, clome:1810060009 product:immunoglobulin heavy chain 6 (heavy
chain of IgM), full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=10090;
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A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

A Hopkins R.F., Jordan R., Toshiyuki S., Carninci P., Prange C.,

A Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Uddin T.B., Hopkins S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Wilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
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Best Local
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InterPro; IPR003597; Ig_c1.
InterPro; IPR003597; Ig_MHC.
InterPro; IPR003596; Ig_MHC.
InterPro; IPR003596; Ig_v.
Pfam; PP07654; C1-set; 3.
Pfam; PP07654; C1-set; 3.
Pfam; PP00047; Ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIXE; 4.
PROSITE; PS00290; IG_MHC; UNKNOWN 1.
SEQUENCE 473 AA; 51699 MW; 9DED5
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MGC6083 prote...
Mus musculus (Mouse).
Metazoa; Chordata;
Marvota; Metazoa; Rodentia;
                                                                                                                                                                                                                                                                                                                                          STRAIN=C57BL/6NCr; TISSUE=Hematopoietic MEDLINE=22388257; PubMed=12477932;
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01-OCT-2003 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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68.1%;
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26,
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Pred. No. 1.3e
|4; Mismatches
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InterPro; IPR003597; Ig cl.
InterPro; IPR003066; Ig MHC.
InterPro; IPR003066; Ig Lv.
Pfam; PF07654; Cl.set; 4.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE; 5.
PROSITE; PS00290; IG MHC; UNKNOWN 3.
SEQUENCE 614 AA; 67746 MW; 839BF
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Q924R5;
01-DEC-2001
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NON TER
SEQUENCE
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                                                                                                                                                                                                                                                                                              Pfam; PF00047; ig; 1.
SMART; SM00406; IGv;
                                                                                                                                                                                                                                                                                                                                                                                Kozono Y., Kozono H., Azuma Submitted (AUG-2001) to the EMBL; AB067784; BAB63269.1; PIR; PH1137; PH1137.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
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Mammalia; Eutheria;
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Submitted (JUN-2003) to t
EMBL; BC053409; AAH53409.
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Jones S.J., Marra M.A.;
"Generation and initial analysis
and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                          PROSITE;
                                                                                                                                                                                                                                                                                                                                      PIR; PH1137; PH1137.
InterPro; IPR007110;
InterPro; IPR003596;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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61
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APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA
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                                       QVQLQQPGAELVKPGASVKLSCKASGYTFTSYWMHWVKQRPGRGLEWIGRIDPNSGGTKY
                                                                  EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPBQGLEWIGCIDPENGDTEY
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139 1
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llarity 65.5%;
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IG_LIKE;
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15221 MW;
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Rodentia;
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; Ig_v.
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Pred. No. 5.8e
18; Mismatches
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                                                                                                                       Score 407; DB 2; L
Pred. No. 1.5e-33;
4; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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.8e-33;
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on update)
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                                                                                                                                                               Length 139,
                                                                                                                                                                                                              CRC64;
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RC Expression driven by an MMTV-LTR enhancer:

RX MEDLINE-2238257; PubMed=12477932;

RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abrameon R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Wyers R.M., Butterfield Y.S.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzyvinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human

RI Tod mouse cDNA sequences ";

RI Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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                                                                               Matches
                                                                                               Query Match
Best Local
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EMEL; BC018280; AAnite
InterPro; IPR003599; Ig.
InterPro; IPR003599; Ig-like.
InterPro; IPR003597; Ig-cl.
InterPro; IPR003596; Ig_MHC.
ThterPro; IPR003596; Ig_v.
                                                                                                                                                                 Pfam; PF07654; C1-set; 3.
Pfam; PF00047; ig; 4.
SMART; SM00409; IG; 2.
SMART; SM00409; IG; 2.
SMART; SM00406; IGV; 1.
SMART; SM00406; IGV; 1.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-Mammary tumor metastatized to lung. MMTV-LTR/Wnt1 Expression driven by an MMTV-LTR enhancer.; Strausberg R.; Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. STRAIN=Czech II;
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Q6PJB2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hypothetical protein.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. STRAIN=Czech II;
                                                                                                                                                               ypothetical
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                                                                                            Similarity
QVQLKQSGAELVKPGASVKLSCKASGYTFNSYIMHWVKQRPGQGLEWIGYFSPYNDDTKC
                            EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .l protein.
465 AA; 51329 MW; 394F43C4E8DB3E21 CRC64;
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                                                                                     66.0%;
                                                                        15;
                                                                       Score 407; DB 2
Pred. No. 6e-33;
5; Mismatches
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                                                                                                     DB 2;
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                                                                 Gaps
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RESULT 8
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AAH18280
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Best Local S
Matches 76
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RA Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.R.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Poshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E.,
RA Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E.,
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                                                                                 HV03 MOUSE
P01747;
21-JUL-1986
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01-OCT-2004
                            21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last seg
01-OCT-2004 (Rel. 45, Last ann
Ig heavy chain V region 36-65.
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical SEQUENCE 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (DEC-2001) to the EMBL; BC018280; AAH18280.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-MAR-2004
02-MAR-2004
02-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN=Czech II; TISSUE=Mammary tumor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Strausberg R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=Czech II; TISSUE=Mammary tu
MEDLINE=22388257; PubMed=12477932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical protein.
Mus musculus (Mouse).
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH18280;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                     APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA 116
                                                                                                                                                                                                                                                                                                   NEKFKGKATLTADKSSTAYMELSSLTSEDSAVYYCARGYYVFDYWGQGTTITVSS
                                                                                                                                                                                                                                                                                                                                                                                                  EVQLQQSGAELVRSGASVKLSCTASGENIKDYYIHWVKQRDEQGLEWIGCIDPENGDTEY
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l. Acad. Sci. U.
          Metazoa;
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465 AA; 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel.
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                                                                                                                                                                                  STANDARD;
     Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51329 MW;
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27,
27,
                                                                              sequence update) annotation updat
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Pred. No. 6e-33;
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Last sequence update)
Last annotation update)
Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                               PRT;
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Sciurognathi; Muridae; Murinae; Mus
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Best Local
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Q9Z1C4;
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EMBL; U78801; AAD00293.1; -.
HSSP; P01751; 1NQB.
                                                                                                                                                                                                                                                                                                                                                                                      Mueller J.P., Giannoni M.A., Hartman Matis L.A., Evans M.J.;
"Humanized porcine VCAM-specific monc IgG2/G4 constant regions block human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Anti-porcine VCAM mab 3F4 heavy chain variable region
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMART; SM00406; TOV; 1.

PROSITE; P850835; IG_LIKE; 1.

3D-structure; Hybridoma; Immunoglobulin V region
                                                                                                                               Pfam; PF00047; 1g; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=97450619; PubMed=9307060;
Mueller J.P., Giannoni M.A., Hartman S.L.,
                                                                                                                                                                                                                                                                                                                                                                  endothelial cells."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "The genetic basis of antibody production: idiotype response of the strain A mouse."; Eur. J. Immunol. 12:1023-1032(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=83131846; PubMed=6186498; Siekevitz M.. Gefter M.L., Brodeur
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                                                          SEQUENCE
                                                                                                                                                                                                                    InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=Balb/c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ptam; PF00047; ig; 1.
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PDB; 1JFQ; X-ray; H=1-120.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
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77; Conserv
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                                                          13036 MW;
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  65.0%;
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7; Mismatches
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  Score 401;
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                                                          90EEC559D31EC4FC CRC64;
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  <u>ب</u>
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Length 118;
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Matches 7
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
1g heavy chain V region B1-8/186-2 precursor.
Mus musculus (Mouse).
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HV07_N
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DOMAIN
                                                                                                                                                                                   InterPro; IPR007110; Ig-like InterPro; IPR003596; Ig-v. Pfam; PF00047; Ig; 1. SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                             PIR; A90809; MHMS18.

PDB; 1A6U; X-ray; H=20-139.

PDB; 1A6W; X-ray; H/I/J=20-139.

PDB; 1A6W; X-ray; H=20-139.

PDB; 1NQB; X-ray; A/C=20-139.
                                                                                                                                                                                                                                                                                                                                                                                                                       antibodies: somatic r
Cell 24:625-637(1981)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=81234548; PubMed=6788376;
Bothwell A.L.M., Paskind M., Reth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                           DOMAIN
                                                                                                                                                        SIGNAL
                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                  EMBL; J00529; AAA38170.1; -.
                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                   entities requires a
                                                                                                                                                                                                                                                                                                                          use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baltimore D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                  3D-structure;
                                                                                                                                                                                                                                                                                                                                                                                                                                 "Heavy chain variable region contribution antibodies: somatic mutation evident in a
                                                                                                                                                                                                                                                                                                                                                                                                  MISCELLANEOUS: The BI making antibodies to
                                                                                                                                                                                                                                                                                                                                                 European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                          (NPb antibodies).
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                                                                                                                                                                PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EVOLOQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
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                                                                                                                                                                                                                                                                                                               license agreement (See http://www.isb-sib.
                                                                                                                                                                                                                                                                                                                                                                                                    the
                                                                                                                                                                                                                                                                                                                                                                                                  mu chain mRNA was cloned from a hybrido hapten (4-hydroxy-3-nitrophenyl)acetyl
                                                                      Framework-3.
D segment.
JH2 SEGMENT.
                                                                                                                                  Ig heavy c
                                                                                                    Complementarity-determining-1. 
Pramework-2. 
Complementarity-determining-2.
                                                                                                                                                                V region; Signal
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is, Mismatches 24;
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                                                                                                                                             heavy chain V region B1-8/186-2
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RESULT 11
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Best Local S
Matches 76
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Q924Q7;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
VH186.2-D-J-C mu protein (Fragment).
Name=VH186.2-D-J-C mu;
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                             PH1129;
PH1131;
PH1137;
PH1137;
PH1139;
PH1142;
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PH1144;
PH1147;
PH1149;
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PH1151;
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                           PR28833
PH1108
PH1114
PH1111
PH11119
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Pred. No. 6.2e-
17; Mismatches
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.2e-33;
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HV02_MOUSE
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                                                                                               Query Match
Best Local S
Matches 77
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                                                                                                                                                                                   DOMAIN
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ig heavy chain V reginus musculus (Mouse).
Eukaryota; Metazoa; C
Mammalia; Eutheria; R
                                                                                                                                                                                                                                                                       PROSITE; PS
Hybridoma;
SIGNAL
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NON_TER 1 1
NON_TER 145 145
SEQUENCE 145 AA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; J00493; AAA38128.1; -. PIR; A94264; HVMSG7. HSSP; P01747; 1JFQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Somatic mutation in genes for the variable portion of immunoglobulin heavy chain."; Science 216:309-311(1982).
-!- SIMILARITY: Contains 1 immunoglobulin-like domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HV02 MOUSE
P01746;
                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                          Pfam; PF00047; ig;
SMART; SM00406; IG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=82152818; PubMed=6801765; Sims J., Rabbitts T.H., Estess P.,
                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Capra J.D.;
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10-OCT-2003
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                                                                                          Similarity 77; Conserv
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                                                                                                                                                                                                                                                                                                                        PS50835;
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00406; IGv; 1.
PS50835; IG LIKE;
; Immunoglobulin V
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nilarity 63.6%;
Conservative 10
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(Rel. 01, Last sequence update)
(Rel. 42, Last annotation update)
in V region 93G7 precursor.
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                                                                                                                                                                              15514 MW; 25A4CBBE31DA5CE8 CRC64;
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Rodentia;
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|VRAGSSVKMSCKASGYTFTSYGINWVKQRPGQGLEWIGYINPGNGYINY
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LIKE;
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                                                                                          ; Score 400.5; DB; Pred. No. 7e-33; 16; Mismatches
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                                                                                                                                                                                                                                                                                            region; Signal.
                                                                                                                                                                                                                        Ig heavy chain V region 93G7 Ig-like.
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Pred. No. 6.5e-33;
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Sciurognathi;
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hi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 77
                                                                                                                                                                                                                                                                                      Q924R1 PRELIMINARY;
Q924R1;
01-DEC-2001 (TrEMBLrel. 19, C;
01-DEC-2001 (TrEMBLrel. 19, L;
01-OCT-2003 (TrEMBLrel. 25, L;
VH186.2-D-J-C mu protein (Frankmer-VH186.2-D-J-C mu;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-C57BL/6;
STRAIN-C57BL/6;
KOZONO Y., KOZONO H., Azuma T.;
KOZONO Y., KOZONO H., Azuma T.;
Submitted (AUG-2001) to the EMB
EMBL; AB069864; BAC54573.1;
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
SEQUENCE FROM N.A.

STRAIN=CS7BL/6;

KOZONO Y., KOZONO H., AZUMA T.

Submitted (AUG-2001) to the E.

EMBL; AR067789; BAB63274.1; -

PIR; F28833; F28833.

PIR; F39932; F33932.

PIR; F39932; F33932.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-2003 (TrEMBLrel. 2
01-OCT-2003 (TrEMBLrel. 2
01-MAR-2004 (TrEMBLrel. 2
Psuedo gene (Fragment).
Name=V23-D-J-IgG1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q7TPE3;
                                                                                                                                                                                         NCBI_TaxID=10090;
[1]
                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NEKFKGKTTLTVDKSSSTAYMOLRSLTSEDSAVYFCARSHYYGGSYDFDYWGQGTPLTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136
136 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
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                                                                                                                                                                                                                                                                                                                        (Fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
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Last seq
                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
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                                                                                        T.;
EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                             Created)
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Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 400; DB 2;
Pred. No. 7.6e-33;
2; Mismatches 24
                                                                                                                                                                                                                               Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99392B1A31F663AF
                                                                                                                                                                                                                                                                                                                                                                                                                                          145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24; Indels
                                                                                            databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRC64;
                                                                                                                                                                                                                                  Euteleostomi; 
; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136;
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Q924R8
    DR READ DR REA
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Best Local S
Matches 77
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Q924R8;
01-DEC-2001
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NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PIR; PH1152; PH1152.
PIR; PH1153; PH1153.
InterPro; IPR007110;
InterPro; IPR003596;
    Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence up
01-OEC-2003 (TrEMBLrel. 25, Last annotation
VH186.2-D-J-C mu protein (Fragment).
Name=VH186.2-D-J-C mu;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR,
PIR,
PIR,
PIR,
PIR,
PIR,
                                                                                                                                                                                                                                                                             Kozono Y., Kozono H., Azuma Submitted (AUG-2001) to the EMBL; AB067781; BAB63266.1;
                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N
STRAIN=C57BL/6;
                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
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SMART; SM00406; IGV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR;
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  F28833;
PH1108;
PH1114;
PH1118;
PH1118;
PH1125;
PH1126;
PH1126;
PH1128;
PH1131;
PH1131;
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PH1118;
PH1119;
PH1119;
PH1128;
PH1128;
PH1128;
PH1129;
PH1139;
PH1137;
PH1137;
PH1137;
PH1137;
PH1144;
PH1149;
PH1149;
PH1149;
PH1149;
PH1150;
PH1150;
PH1151;
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SM00406; IGv; 1.
; PS50835; IG_LIKE; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC--YGGTITFA--YWGQGTLVTVSA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QVQLQQPGAELVKPGASVKLSCKASGYTFTSYWMHWVKQRPGRGLEWIGRIDPNSGGTKY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          145
145 AA;
  F28833.
PH1105.
PH1114.
PH1114.
PH1118.
PH1125.
PH1126.
PH1128.
PH1129.
PH1131.
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PH1119
PH1125
PH1125
PH1126
PH1129
PH1131
PH1137
PH1137
PH1137
PH1144
PH1149
PH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
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15979 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Ig-like.
; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64.5%;
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Pred. No. 1.3e-32;
.7; Mismatches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0162D0A26C746C04 CRC64;
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on update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi; 
; Murinae; Mus.
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Gaps

116 60

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Search completed: December 29, 2004, 18:05:18 Job time: 80.0708 secs
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                                                                                                                                                                                                                         Query Match 64.4%; Score 397.5; DB 2; Length 146; Best Local Similarity 62.8%; Pred. No. 1.5e-32; Matches 76; Conservative 18; Mismatches 22; Indels 5;
                                                                                                                                                                                                                   InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; Ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
NON TER 146
SEQUENCE 146 AA; 16216 MW;
                                                                                                                                                                                                                                                                                                          PIR; PH1137; PH1137.
PIR; PH1142; PH1142.
PIR; PH1144; PH1144.
PIR; PH1147; PH1147.
PIR; PH1147; PH1147.
PIR; PH1150; PH1150.
PIR; PH1151; PH1151.
PIR; PH1152; PH1152.
PIR; PH1153; PH1153.
PIR; PH1153; PH1153.
                                          121 S 121
                                                              116 A 116
                                                                                    146 146
146 AA; 16216 MW; 92460F1FDF1B7538 CRC64;
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Minimum :
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No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
        Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being pu and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B B
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493
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seq length:
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617
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Compugen Ltd.
Ig heavy chain V r
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| 2 S41.394 2 S37.483 2 PH1482 2 PC2269 2 PC2365 2 C30560 2 C30560 2 PS0024 2 PS0751 2 PS07751 2 PS17751 3 PC4402 1 HVMSG7 2 S251752 2 S251752 |
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## ALIGNMENTS

RESULT 1

235174

235174

Ig heavy chain V region - mouse

C;Species: Mus musculus (house mouse)

C;Date: 20-Feb-1995 #sequence revision 20-Feb-1995

C;Accession: S25174; S3131

R;Monestier, M.; Fasy, T.M.; Losman, M.J.; Novick, submitted to the EMBL Data Library, July 1992

submitted to the EMBL Data Library, July 1992

monoclonal antibodies to core histon

K.E.; Muller,

#text\_change 21-Jan-2000

```
RESULT 2
S04576
Ig heavy chain precursor V region (MRL-histone 7H) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 21-Jan-2000
C;Accession: S04576
R;Kofler, R.; Noonan, D.J.; Strohal, R.; Balderas, R.S.; Moller, N.P.H.; Dixon, P.J.; T'
Eur. J. Immunol. 17, 91-95, 1987
Bur. J. Indicate analysis of the murine lupus-associated anti-self response: involvem:
A;Reference number: S04573; MUID:87133856; PMID:3102255
A;Accession: S04576
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-136 <KOP>
A;Cross-references: EMBL:X14624; NID:g52029; PIDN:CAA32777.1; PID:g52030
C;Superfamily: immunoglobulin V region; immunoglobulin homology
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A;Molecule type: mRNA
A;Residues: 1-118 <MON>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X67622; NID:g51854; PIDN:CAA47880.1; C;Superfamily: immunoglobulin V region; immunoglobulin homolocC;Reywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-118 < MO2>
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S29594
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C;Superfamily: imn
C;Keywords: hetero
F;34-115/Domain: j
                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-178 <SEY>
                                                                                                                                                                                                                      R;Seymour, R.
submitted to the EMBL Data
A;Reference number: S29593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ig heavy chain V region precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 08-May-1995 #sequence_revision 21-Jul-1995 #text_change 21-Jan-2000
C;Accession: $52445
R;Bardoz, J.; Kraehenbuhl, J.P.
submitted to the EMBL Data Library, November 1994
A;Description: Specific amplification by the polymerase chain reaction of realization: $52445
A;Recrease number: $52445
A;Status: preliminary
A;Residues: 17137 CBER>
A;Residues: 17137 CBER>
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C;Genetics:
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                                                                                                                                                                                                         Accession: S29594
                                                                                                                                                                                                                                                                          g gamma chain (WM65) - mouse (fragment)
;Species: Mus musculus (house mouse)
;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 05-Nov-1999
;Accession: S29594
                                                                                                           Cross-references: EMBL:X57857; NID:g52590; PIDN:CAA40992.1; PID:g52591 Keywords: immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;Superfamily: immunoglobulin V region; immunoglobulin homology;Keywords: heterotetramer; immunoglobulin
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                                                Similarity 95; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                        DPKFQGKASITADTSSNTAYLQLSSLASEDTAVYYCAYYGTSYWFPYWGQGTLVTVSA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVQLQQSGAELVRPGALVKLSCKASGFNIKDYYMYWVKQRPEQGLEWIGWIDPENGNTVY 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVQLQQSGAELVRSGASVKLSCTASGENIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EVQLQQSGAELVRSGASVKLSCTASGENIKDYY1HWVKQRPEQGLEWIGCIDPENGDTEY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ASKFQGKATMTADISSNTTYLQLSSLTSEDTAVYYCTTYGAYAMDYWGQGTSVTVSS 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYG-GTITFAYMGQGTLVTVSA 116
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                                                         79.9%;
80.5%;
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82.2%;
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                                          8,
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Pred. No. 2e-39;
7; Mismatches
                                        Score 493; DB 2;
Pred. No. 1.2e-38;
B; Mismatches 13

    Mismatches

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Pred. No. 1.8
                                                                                                                                                                                                                                     February 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; DB 2;
1.8e-39;
                                        13;
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                                                                        Length 178
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R.Tempest, P.R.; Bremner, P.; Lambert, M.; Taylor, G.; Furze, J.M.; Carr, F.J.; Harris, Bio/Technology 9, 266-271, 1991
A;Title: Reshaping a human monoclonal antibody to inhibit human respiratory syncytial vi A;Reference number: 815672; MUID:91337412; PMID:1367535
                                                                                                     C; Keywords: heter; 15-98/Domain:
                                                                                    A;Cross-references: EMBL:X58835; NID:g51978; PIDN:CAA41644.1; PID:g51979
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-98/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                      Ig heavy chain V region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 18-Feb-1994 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                 A;Residues: 1-116 <TEM>
                                                                                                                                                                                                                     A; Molecule type: mRNA
                                                                                                                                                                                                                                    A; Status: preliminary; nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                   C;Accession: S15672
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C;Keywords: heterotetramer; immunoglobulin homology <IMM>
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A;Title: The limited diversity of the mouse gamma-chains anti-GAT repertoire A;Reference number: S07453; MUID:83058021; PMID:6815271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein
A; Residues: 1-43 < ROC2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ig heavy chain V-D-J region (hybridoma G5 Bb 2.2) - mouse (fragment) c;Species: Mus musculus (house mouse) C;Decies: Mus musculus (house mouse) C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 20-Jun-2000 C;Accession: S03471; S07453 R;Rocca-Serra, J.; Matthes, H.W.; Kaartinen, M.; Milstein, C.; Theze, J.; Fougereau, EMBO J. 2, 867-872, 1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Title: Analysis of antibody diversity: V-D-J mRNA nucleotide sequence of four anti-Gampervariable regions.
A;Reference number: S03471; MUID:84057768; PMID:6416834
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              Matches
                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;Molecule type: mRNA
;Residues: 7-120 <ROC1>
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                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHMVKQRPEQGLEWIGCIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95;
                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 APNFQGRATMTADISSNTAYLQLSSLTSEDTAVYYCYGGTITFA--YWGQGTLVTVSA 116
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVQLQQSGAELVKPGASVKLSCTASGENIKDTYMHWVKQRPEQGLEWIGRIDPANGNTKY
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                           77.5%;
78.3%;
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79.8%;
    9;
Score 478; DB 2;
Pred. No. 1.8e-37;
9; Mismatches 16
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Pred. No. 2.5e-38;
8; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2;
                                               Length 116;
  Indels
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2 VQLQQSGAELVRSGASVXLSCTASGENIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEYA

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C;Species: Mus """"", Equence_revision: 40 ..., C;Date: 22-Nov-1993 #sequence_revision: 40 ..., C;Date: 22-Nov-1993 #sequence_revision: 40 ..., C;Accession: $17586 C;
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$17586
$17586
$19 heavy chain V region (B8) - mouse (fragment)

C;Species: Mus musculus (house mouse)

C;Date: 22-Nov-1993 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Title: Comparative sequence and immunochemical analyses A;Reference number: S06815; MUID:90064531; PMID:2555519 A;Accession: S06823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
S06823
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A;Molecule type: mRNA
A;Residues: 1-117 <MYL>
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A; Residues: 1-122 <MIL>
C; Superfamily: immunoglobulin V region; imm
C; Keywords: heterotetramer; immunoglobulin
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C;Species: Mus musculus (house mouse)
C;Date: 30-Jun-1992 #sequence_revision
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J. Mol. Biol. 209, 763-778, 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;Keywords: heterotetramer; immunoglobu;
;15-99/Domain: immunoglobulin homology
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Best Local
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Best Local
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                                                           SA 116
                                                                                                                                                                             YAPNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGG----TITFAYWGQGTLVTV 114
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                                                                                                                         YDPKFQGKATITADTSSNTAYLQLSSLTSEDTAVYYCARGWLRRDAMGVDYWGQGTSV
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   122
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                                                                                                                                                                                                                                                                                                                                                                                                      76.8%;
77.9%;
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77.5%; Pred. No. 3.9e-37;
tive 10; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1989
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                                                                                                                                                                                                                                                                                                                                                                        Score 474; DB 2;
Pred. No. 4.5e-37;
B; Mismatches 13
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                                                                                                                                                      Best Loc
Matches
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Ig gamma-1 chain - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 01-Aug-1997 #text_change
C;Accession: S49220
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A;Molecule type: protein
A;Molecule type: protein
A;Residues: 1-43 <ROC2>
C;Superfamily: immunoglobulin V region; immunoglobulin
F;15-98/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                    A;Cross-references: EMBL:Z37502; NID:g541778; PIDN:CAA85732.1; PID:g541779
A;Experimental source: strain Balb/c
C;Superfamily: immunoglobulin C region; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Kipp, B.; Becker, W.P.; Schlaak, M.M. submitted to the EMBL Data Library, September 1994
A;Description: Cloning and expression of a recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Rocca-Serra, J.; Matthes, H.
EMBO J. 2, 867-872, 1983
A;Title: Analysis of antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Mus musculus (house mouse)
A;Variety: strain BALB/c
C;Date: 26-Feb-1998 #sequence_revision 26-Feb-1998 #text_change 21-Jan-2000
C;Date: 36-Feb-1998 #sequence_revision 26-Feb-1998 #text_change 21-Jan-2000
C;Accession: S03482; S07453
                                                                                                                                                                      F;1-120/Domain: V region #status predicted <VRG>F;121-221/Domain: C region #status predicted <CRF;139-203/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-221 <KIP>
                                                                                                                                                                                                                                                                                                                                                                                                                         A; Description: Cloning and A; Reference number: S49220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Reference number: S07453; MUID: 83058021; A; Accession: S07453
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A;Title: The limited diversity of the mouse gamma-chains anti-GAT repertoire
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 10-115 <ROC1>
A;Cross-references: EMBL:X03219
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A;Status: preliminary
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Ig heavy chain V-D-J region (hybridoma
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                                                                                                                                                                                                                                             Keywords: immunoglobulin
                                                                                                                       Query Match
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1 EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY 60
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                                                                                             74.6%;
75.0%;
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Pred. No. 8.9e-37;
8; Mismatches 15
                                                                   Score 460.5; DB 2;
Pred. No. 1.5e-35;
2; Mismatches 13;
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7. Exp. Med. 176, 761-779, 1992
A;Title: Both IgM and IgG anti-DNA antibodies are the products of clonally A;Reference number: PH0971; MUID:92381444; PMID:1512540
A;Accession: PH1013
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PH1013
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A;Title: The limited diversity of the mouse gamma-chains anti-GAT repertoire A;Reference number: 807453; MUID:83058021; PMID:6815271
A;Accession: 807453
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C;Accession: PH1013
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Superfamily: immunoglobulin V region; immunoglobulin homology
 F;15-98/Domain: immunoglobulin homology <IMM>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: mRNA
A;Residues: 10-120 <ROC1>
A;Cross-references: EMBL:X07144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Note: this sequence was determined from the differentiated gene R; Rocca-Serra, J.; Mazie, J.C.; Moinier, D.; Leclercq, L.; Somme,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Title: Analysis of antibody diversity: V-D-J mRNA nucleotide sequence of four anti-GAT hypervariable regions.
A;Reference number: S03471; MUID:84057768; PMID:6416834
A;Accession: S03484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Mus musculus (house mouse)
A;Variety: strain BALB/c
C;Date: 26-Feb-1998 #sequence_revision 26-Feb-1998 #text_change 21-Jan-2000
C;Accession: S03484; S07453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Rocca-Serra, J.; Matthes, H.W.; Kaartinen, M.; Milstein, EMBO J. 2, 867-872, 1983
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                                                                                                                                                                               Experimental source: B cell, strain [NZB x NZW]F1; Superfamily: immunoglobulin V region; immunoglobulin; Keywords: heterotetramer; immunoglobulin
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                                                                                                                                                                   ;15-98/Domain: immunoglobulin homology <IMM>
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Best Local S
Matches 90
                                                                                                                 Query Match
Best Local :
                                                                                                                                                                                                                                                                                  Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                     y heavy chain V region (clone 111.67) - mouse (fragment)
Species: Mus musculus (house mouse)
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                                                                                                                 Similarity
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                                      EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
            EVQLQQSGAELVRPGASVKLSCTASGFNIKDDYLHWVKQRPEQGLEWIGRIDPANGNTKY
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                                                                                                        73.5%;
83.2%;
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75.6%;
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                                                                                      Score 453.5; DB 2
Pred. No. 3.1e-35;
6; Mismatches 11
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Pred. No. 1.9e-35;
8; Mismatches 18
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p53 specific single-chain antibody Pab421 - human C;Species: Homo sapiens (man) C;Date: 15-May-1997 #sequence_revision 15-May-199
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submitted to the EMBL Data Library, September 1991
A;Description: Cloning and sequencing of the cDNA A;Reference number: S24287
A;Accession: S24289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ig gamma chain V region (JS34/32) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 20-Jun-2000
C;Accession: S24289
                                                                                                                                                                                                                                          F;14-97/Domain:
                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                           A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                R; Moncharmont,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:U20617
C;Keywords: heterotetramer; in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-268 < TAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Tang, P.M.; Foltz, L.A.; Mahoney, W.C.; Schueler, P.A.
J. Biol. Chem. 270, 7829-7835, 1995
A;Title: A high affinity digoxin-binding protein displayed
A;Reference number: A56446; MUID:95229583; PMID:7713873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ig heavy chain V region (3H-3H scFv) - mouse (strain BALB/C) C;Species: Mus musculus (house mouse) C;Date: 19-Jan-1996 #sequence_revision 19-Jan-1996 #text_change C;Accession: A56446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: preliminary
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                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                       Cross-references: EMEL:X62705; NID:g51690; PIDN:CAA44584.1; PID:g1333963
                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Accession: S24289
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    61
                                                                                                                                                                 88;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 APNEQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC--YGGTITFAYWGQGTLVTVSA 116
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90;
                                                                                            VQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEVA 61
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                    PNFQGRATMTADISSNTAYLQLSSLISSEDTAVYYC--YGGTITFAYMGQGTLVTVSA 116
                                                                         VQLQESGAELVKPGASVKLSCTASVFNIQDTYMHWVRQRPKQGLEWIGRIDPANGNTHFD
PKFQGKATITADTSSNTAYLQLSSLTSEDTAVYYCARWAG-YYFDYWGQGTTLTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QVKLQESGABLVKPGASVKLSCTTSGFNIKDTYMHWVKQRPEQGLEWIGRIAPANGITKY 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTI-TFAYM 106
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                                                                                                                                                                                                                                      immunoglobulin homology < IMM>
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76.3%;
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                                                                                                                                                      Score 451.5; DB 2;
Pred. No. 5.2e-35;
3; Mismatches 13;
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Pred. No. 9.2e-35;
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                                                                                                                                                                                              DB 2;
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#sequence\_revision 15-May-1997 #text\_change 18-Jul-1997

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C;Accession: JC5322
R;Jannot, C.B.; Hynes, N.E.
Biochem. Biophys. Res. Commun. 230, 242-246, 1997
A;Title: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
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A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
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A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of scPv-421, a single-chain antibody targeted to p53.
A;Ritle: Characterization of
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
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                                                                                                                                                                                                                                        seq length:
seq length:
A Geneseq_23Sep04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
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Gapop 10.0 ,
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score greater and is derived Pred. No. No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, derived by analysis of the total score distribution.

## SUMMARIES

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| Result<br>No. | Score<br>537<br>537 | v : : : : : : : : : : : : : : : : : : : |     | DB  | ID ABR61864 ADQ31285 | Description<br>Abr61864 Mo<br>Adg31245 Mu |
|---------------|---------------------|---|-----|-----|----------------------|---|
| <b>4.</b> R   | 526<br>533          | •                                       | 243 | ง ស | AAW60769             | Aaw60769                                  |
| ი თ           | 523<br>519          | 84.8<br>84.1                            | 116 | ω N | AAY70787             |   |
| 7             | 516                 |   | 535 | N   | AAW28491             |   |
| 89            | 516                 | •                                       | 535 | N   | AAW28492             |   |
| 9             | 514.5               | 83.4                                    | 119 | σ   | ABB99635             |   |
| 10            | 511                 | •                                       | 112 | N   | AAW89173             |   |
| Ľ             | 508                 | 82.3                                    | 124 | N   | AAR60566             |   |
| 12            | 506                 | ٠                                       | 266 | œ   | ADH77307             |   |
| 13            | 505                 | •                                       | 120 | N   | AAW41387             |   |
| 14            | 505                 | 81.8                                    | 255 | N   | AAW41394             |   |
| 15            | 505                 |   | 281 | N   | AAW82744             |   |
| 16            | 505                 |   | 642 | ν   | AAW82741             |   |
| 17            | 505                 | 81.8                                    | 666 | N   | AAW82745             |   |
| 18            | 503                 | 81.5                                    | 124 | N   | AAR60565             |   |
| 19            | 503                 |   | 124 | 5   | ABB83941             |   |
| 20            | 503                 |   | 124 | თ   | ABG75594             |   |
| 21            | 503                 | 81.5                                    | 124 | œ   | ADN08039             |   |
| 22            | 502                 |   | 120 | ထ   | ADK18142             |   |
| 23            | 502                 | 81.4                                    | 120 | œ   | ADJ54095             | Adj54095                                  |
| 24            | 502                 | 81.4                                    | 244 | æ   | ADK18141             |   |
| ა<br>5        | 502                 | 81.4                                    | 244 | ø   | ADJ54093             |   |

| 45        | 44        | 43        | 42        | 41        | 40        | 39        | 38        | 37        | 36        | 35        | 3<br>4    | 33        | 32        | 31        | 30        | 29         | 28        | 27        | 6     |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-------|
| 495.5     | 496       | 496       | 496       | 496       | 496       | 498.5     | 498.5     | 498.5     | 498.5     | 500       | 501       | 501       | 501       | 501       | 501       | 501        | 502       | 502       |       |
| 80.3      | 80.4      | 80.4      | 80.4      | 80.4      | 80.4      | 80.8      | 80.8      | 80.8      | 80.8      | 81.0      | 81.2      | 81.2      | 81.2      | 81.2      | •         | 81.2       | 81.4      | 81.4      |       |
| 117       | 124       | 124       | 124       | 124       | 124       | 254       | 254       | 254       | 254       | 137       | 553       | 553       | 553       | 553       | 136       | 136        | 556       | 556       |       |
| 4         | œ         | σ         | σ         | ŲΊ        | N         | N         | N         | N         | N         | N         | 4         | 4         | N         | N         | 4         | 4          | 4,        | 4         | t     |
| AAB82709  | ADH29099  | ABU09037  | ABC07328  | AAU76632  | AAY39528  | AAY30121  | AAY30123  | AAY30119  | AAY30117  | AAR95948  | AAB85455  | AAB61960  | AAW73223  | AAW11508  | AAB35290  | AAU76694   | AAU97935  | AAU80040  | ***** |
| Aab82709  | Adh29099  | Abu09037  | Abo07328  | Aau76632  | Aay39528  | Aay30121  | Aay30123  | Aay30119  | Aay30117  | Aar95948  | Aab85455  | Aab61960  | Aaw73223  | Aaw11508  | Aab35290  | . Aau76694 | Aau97935  | Aau80040  |       |
| VEGF anta | Mouse mon | Murine CO | Murine ca | Murine Co | Murine CO | Murine an | Murine an | Murine an | Murine an | HNK-20 va | Bispecifi | Bispecifi | H22-anti- | Single ch | Murine PS | Mouse hea  | scFv-rear | Scrv-rear |       |

# ALIGNMENTS

# RESULT 1 ABR61864

ABR61864 standard; protein; 122 ₿

ABR61864;

12-SEP-2003 (first entry)

Mouse MAb 1A1 heavy chain variable region sequence.

monoclonal antibody; 1A1. Antibody; beta-chemokine; monocyte chemotactic protein; MCP-1; MCP-2; MCP-3; antiinflammatory; nephrotrophic; dermatological; hepatotrophic; neuroprotective; antiatherosclerotic; antirheumatic; antiathritic; cytostatic; anticonvulsant; antidiabetic; ophthalmological; vasotropic; immunomodulator; cerebroprotective; antiulcer; antiparkinsonian; MAb;

Mus musculus.

WO2003048083-A2

12-JUN-2003.

27-NOV-2002; 2002WO-US038229.

30-NOV-2001; 2001US-0343391P 24-MAY-2002; 2002US-0383277P 01-AUG-2002; 2002US-0400469P

(BIOJ ) BIOGEN INC.

De Fougerolles AR, Kotelianski VE, Garber E, Reid ü

N-PSDB; WPI; 2003-532819/50. ACC84729.

Novel antibody or its antigen binding fragment that specifically binds to monocyte chemotactic protein-2 and other beta-chemokine, useful for detecting presence of beta-chemokine in sample, and blocking chemotaxis.

Example 8; Page 66; 100pp; English.

The invention relates to an antibody or its antigen binding fragment (AF) that specifically binds to a plurality of beta-chemokines, particularly monocyte chemotactic proteins MCP-1, MCP-2 and MCP-3. The antibodies are useful in an immunoassay method for detecting the presence of a beta-chemokine in a sample, and for blocking chemotaxis. The antibodies or their AFs are useful for treating a subject suffering from a disorder

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RESULT 2
ADQ31245
ID 31245
ID 3231245
AC ADQ3
AX ADQ3
AX OPS
DE Muri
XX Muri
XX Muri
XX Inpu
KW Inpu
KW Inmu
K
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Best Local
This invention relates to an antibody for treating or preventing disorders associated with detrimental monocyte chemotactic protestrivity. Specifically, it refers to humanised antibodies that b.
                                                                                                                              Example 9;
                                                                                                                                                                               New antibodies against monocyte chemotactic proteins (MCP), treating or preventing disorders associated with detrimental activity, e.g. glomerulonephritis, scleroderma, multiple scleatheroscienosis.
                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                     De Fougerolles AR,
Van Vlijmen H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-NOV-2002; 2002US-0430007P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-NOV-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunopathological disorder; antiarteriosclerotic; antiarthritic; antiinflammatory; antirheumatic; cytostatic; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Murine 1A1 heavy chain variable domain antibody protein SeqID 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOG-) BIOGEN IDEC MA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hepatotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;
lupus nephritis; atherosclerosis; inflammatory bowel disease;
rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            murine; 1A1; monocyte chemotactic protein; beta-chemokine family; MCP-3; glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADQ31245 standard;
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DB; ADQ31243.
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                                                                                                                           SEQ
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immunomodulator; nephrotropic; neuroprotective; mouse; MCP
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84.8%;
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Pred. No. 3.8e-41;
3; Mismatches 4
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c protein (MCP) that bind to

New antibodies against treating or preventing

monocyte chemotactic disorders associated

proteins (MCP), useful with detrimental MCP

for

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ADQ31285
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Van Vlijmen H;
                                                                             WPI; 2004-461110/43.
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                                                                                                                                                                                                                                                                       27-NOV-2002; 2002US-0430007P
                                                                                                                                                                                                                                                                                                                                   25-NOV-2003; 2003WO-US037834
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Pred. No. 3.8e
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention relates to an antibody for treating or preventing disorders associated with detrimental monocyte chemotactic protein (MCP) activity. Specifically, it refers to humanised antibodies that bind to members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3 belong) and in particular antibodies that have been modelled on, and modified from, the variable complementarity determining regions (CDRs) of the murine 11K2 and 1Al immunoglobulin sequences. The present invention describes using these antibodies to treat or prevent diseases and disorders including glomerulonephritis, screenederma, cirrhosis, multiple sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases, rhound arthritis, inflammatory diseases, fibrotic disorders, cancer and immunopathological disorders. Accordingly, they can be used in the development of pharmaceutical compositions that exhibit
                                                                                                                                                                                                                                                                       regulatory domain; p53 mutant; H273; W248; G281; p53-dependent trans-activating activity; restoration; tumour-suppressing activity; tumour cell; treatment;
                   Bracco
                                                                                                                                                                                                                                                                                                             Single chain antibody; regulatory domain; p53
                                                                                                                                                                                                                                                                                                                                                               Single chain antibody (ScFv)
                                                                                                                                                                                                                                                                                                                                                                                                   08-SEP-1998
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                                                                                                                      27-OCT-1997;
                                                                                                                                                        07-MAY-1998.
                                                                                                                                                                                        WO9818825-A1
                                                                                                                                                                                                                                                           cancer;
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                                                    (RHON ) RHONE-POULENC RORER SA.
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85.2%;
                                                                                                                                                                                                                                                                                                           ScFv 421; mouse; p53 protein; oligomerisation mutant; H273; W248; G281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                          421 that binds to mutant p53 proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 528; DB 8;
Pred. No. 2.5e-40;
2; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 122,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                         hyper-proliferation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117
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RESULT 5
AAW01586
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Best Local S
Matches 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents a single chain antibody (ScFv) designated 421. The antibody binds to an epitope present in the C-terminal region of the p53 protein that includes onligomerisation and regulatory domains, specifically between positions 320 and 393. ScFv 421 is directed against p53 mutants, particularly H273, W248 and G281 mutants. When the ScFV is introduced into cells containing a mutant p53 protein, p53-dependent trans-activating activity is restored. ScFV 421 is specific for p53-mutants that have lost tumour-suppressing activity and are present in tumour cells. It is particularly used to treat hyper-proliferation associated with these mutants (e.g. cancer and re-stenosis) but may also be used in vitro for studying mechanisms of activity of p53 or its mutant and to purify or detect p53
                                                                                                                                                                   05-JUN-1995;
10-OCT-1995;
                        DNA encoding heavy metal binding polypeptide sequences - used for detecting, removing, adding or neutralising heavy metals, such as
                                                                                                                                                                                                                                                                                                                                           Monoclonal antil pharmaceutical;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Restoring p53-dependent trans-activating activity to cell mutant p53 - by delivering single-chain antibody specific particularly for treatment of tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-272140/24.
N-PSDB; AAV36236.
                                                                   WPI; 1997-043140/04
N-PSDB; AAT58260.
                                                                                                             Wylie DE,
                                                                                                                                                                                                             05-JUN-1996;
                                                                                                                                                                                                                                                                      WO9639518-A1
                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                               heavy metal.
                                                                                                                                                                                                                                                                                                                                                                                     Lead binding MAb 14G11 heavy chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                   22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW01586;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW01586 standard; protein; 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 243
                                                                                                                                          (BION-) BIONEBRASKA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Page 31; 54pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 EVQLQQSGABLVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APKFQGKATMTADTSSNTAYLQLSSLASEDTAVYYCNFYGDALD--YMGQGTTVTVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC--YGGTITFAYWGQGTLVTVSA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OVQLQQSGAELVRSGASVKLSCTASGFNIKDYYMHWVKQRPEQGLEWIGWIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                             antibody; Foical; health
                                                                                                          Lopez 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                   95US-00462798
95US-00541373
                                                                                                                                                                                                               96WO-US009258
                                                                                                                                                                                                                                                                                                                                           Fd fragment; lead cation; perfume;
th care; skin treatment; pesticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85.3%;
                                                                                                             Murray
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 526; DB 2;
Pred. No. 8.1e-40;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                             cosmetic;
herbicide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      containing for the mutant,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                           lead
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RESULT 6
AAX770787
ID AAX770787
XX AAX77
XX AAX7
XX AAX7
XX Muri
XX Muri
XX Muri
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FT Regi
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XX MO2
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Best Local
                                               WPI; 2000-339512/29
                                                                                                    Cohen
                                                                                                                                      (YEDA ) YEDA RES & DEV CO LTD.
                                                                                                                                                                                                19-OCT-1998;
                                                                                                                                                                                                                                                  19-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Region
                                                                                                                                                                                                                                                                                                                                                    WO200023082-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Murine anti-p53 monoclonal antibody PAb-421 heavy chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SLE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents the heavy chain variable region for monoclonal antibody (MAD) 14011, which immunoreacts with a lead cation. The sequence was derived from RNA isolated from mouse hybridoma cells. It can be used for binding heavy metals, such as lead cations. It can be used for detecting, removing, adding or neutralising the heavy aqueous liquid systems, in biological or environmental systems or in such compositions as perfumes, cosmetics, pharmaceuticals, health care products, skin treatment products, pesticides, herbicides, solvents used in the production of semi-conductor and integrated circuit components and production materials for electronic components. The products can provide for applications involving minute amounts of specific heavy metals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neavy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murine; p53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY70787 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     systemic lupus
                                                                                              Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chain variable region; VH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DPKFQGKATMTADTSSNIAYLQLSSLTSEDTAVYYCNPYGYDDAMDYWGQGTSVTVSS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC--YGGTITFAYMGQGTLYTVSA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EVÓLÓOSGABLVRSGÁSVKLSCTASGFNÍKDYYMHWVKORPBÓGLEWIGWIDÞENGDTBY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                         Rotter V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA;
                                                                                                                                                                                           98US-0104816P
                                                                                                                                                                                                                                             99WO-US024443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ein; monoclonal antibody; PAb-421; DNA-binding cimmunosuppressive; antiinflammatory; autoimmune upus erythematosus; diagnosis; treatment; autoant able region; VH; complementarity determining reg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75;
                                                                                                                                                                                                                                                                                                                                                                                   note= "Complementarity determining
                                                                                                                                                                                                                                                                                                                                                                                                                              label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= CDR
/note= "Complementarity determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note=_ "Complementarity determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         label= CDR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   105
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                                                                                         Erez-Alon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 523; DB 2;
Pred. No. 6.9e-40;
3; Mismatches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             determining region; CDR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          autoantigen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             response;
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Treatment of systemic lupus erythematosus

by down-regulating

Claimed variants of protein p53 have at

least part of the oligomerisation

Claim 36; Page 88-90; 133pp;

French

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RESULT 7
AAW28491
ID AAW2
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                      New p53 variants e.g. with oligomerisation domain zipper - useful for treating hyper-proliferative
                                                                                                                                                                                                                                                                                                Synthetic. Chimeric.
                                                                                                   N-PSDB;
                                                                                                               WPI; 1997-132633/12.
                                                                                                                                                                                                                                              06-FEB-1997.
                                                                                                                                        Conseiller E,
                                                                                                                                                                                           19-JUL-1995;
                                                                                                                                                                                                                    17-JUL-1996;
                                                                                                                                                                                                                                                                      WO9704092-A1
                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                             anti-oncogene; hyperproliferation; cancer;
tumour suppression; apoptosis; single chair
                                                                                                                                                                                                                                                                                                                                                                               Leucine zipper domain; LZD; oligomerisation domain; mutant; mutein; substitution; replacement; transactivation; viral protein VP16; HSV;
                                                                                                                                                                                                                                                                                                                                                                                                                            Human p53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The patent discloses a method for the treatment of systemic lupus erythematosus (SLE) by down-regulating the autoimmune response to the C-terminal DNA-binding domain of p53 protein by an active compound. The present sequence is a heavy chain variable region of monoclonal antibody PAb-421 which is specific to the C-terminal DNA-binding domain of murine p53 protein. PAb-421 antibody and peptides based on complementarity determining regions of light and heavy chain variable regions of the antibody, are examples of active compounds useful in the diagnosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW28491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW28491 standard;
                                                                                                                                                                                                                                                                                                                                                                         nti-oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 116 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   prevention and treatment of SLE in humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      autoimmune response to the C-terminal DNA-binding domain of the p53 protein by an active compound comprising of antibodies to p53 or fragments of p53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 78; Fig 9; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100;
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                                                                                                                                                                                                                                                                                                                        simplex virus.
                                                                                                   AAT86221.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APNFOGRATMTADTSSNTAYLOLSSLTSEDTAVYYC--YGGTITFAYWGQGTLVTVSA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QVKLQEŚGAELVRŚGAŚVKLŚCTAŚGFNIKDYYMHWVKQRPEQGLEWIGWIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                        protein variant S-325 encoded by pEC176.
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                                                                                                                                                                 POULENC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                        Bracco
                                                                                                                                                                                         95FR-00008729.
                                                                                                                                                                                                                  96WO-FR001111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                                                                                                                                                                            apoptosis; single
                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.1%;
84.7%;
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                                                                                                                                                                 RORER
                                                                                                                                                                 SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 519; DB 3; I
Pred. No. 1.6e-39;
7; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                         chain antibody variable domain.
                                                      domain replaced by leucine rative disorders, esp. cance
                                                                                                                                                                                                                                                                                                                                                                        restenosis; ScFv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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                                                       cancer
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RESULT 8
AAW28492
ID AAW2
XX AAW2
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XX Homo
OS Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 100; Conserv
                               New p53 variants e.g. with oligomerisation domain replaced by leucine zipper - useful for treating hyper-proliferative disorders, esp. canculant restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Herpes simplex virus. Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Leucine zipper domain; LZD; oligomerisation domain; mutant; mutein; substitution; replacement; transactivation; viral protein VP16; HSV; anti-oncogene; hyperproliferation; cancer; restenosis; ScFv;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9704092-A1
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                                                                                                                                                                                                                             Conseiller E,
                                                                                                                                                                                                                                                                                                                                                                19-JUL-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tumour suppression; apoptosis; single chain antibody variable domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human p53 protein variant S-325H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QVQLQESGAELVGSGASVKLSCTASGFNIKDYYMHWVKQRPEQGLEWIGWIDPENGDTEY 62
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                                                                                                                                                                                                                                                                                               POULENC RORER SA
                                                                                                                                                                                                                             Bracco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein;
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84.7%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                position 182 of wild-type p53
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.6e-38;
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                                                          esp. cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claimed variants of protein p53 have at least part of the oligomerisation CC domain deleted and replaced by a leucine zipper domain. The mutants CC preferably also have at least part of the p53 transactivation domain CC (amino acids 1-74) deleted and replaced by the transactivating domain CC (TD) from herpes simplex virus viral protein VP16 (amino acids 411-490) CC or by a protein domain able to bind selectively to a transactivator, CC especially a single-chain antibody variable domain (SCPV). The present CC sequence is that of a specifically claimed p53 variant designated S-325H CC and comprising a SCFV domain, amino acids 75-325 of human wild-type p53 CC (but with Arg182 replaced by His) and a leucine zipper domain at the C-terminal. The p53 variants are more active and more stable tumour CC suppressors and apoptosis-inducing agents than wild-type p53 and are active where the wild-type protein is not, i.e. they are not inactivated CC by dominant negative or oncogenic mutants, nor by other cellular proteins CC chashes the leucine zipper domain prevents formation of inactive mixed CC because the leucine zipper domain prevents formation of specification and control of the protein control of the prote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
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                                                                               New neutralizing antibodies directed against Cathepsin B, useful treating and/or diagnosing a disease associated with an increased cathepsin B activity or concentration, e.g. cancer or arthritis.
                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                            18-MAY-2001; 2001SI-00000132.
                                                                                                                                                                                                                                                                                                                                                                                                      02-APR-2002;
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                                                                                                                                                                                                                                                                      Kog J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-NOV-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Heavy chain; variable region; monoclonal antibody; 2A2; cathepsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2A2 monoclonal antibody heavy chain variable region.
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                                                                                                                                                                                                                                                                                                                  (KRKA)
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                                                                                                                                                                               2003-120791/11.
DB; ABV77141.
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                                                                                                                                                                                                                                                                 Premzl A,
                                                                                                                                                                                                                                                                                                                KRKA TOVARNA ZDRAVIL DD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC--YGGTITFAYWGQGTLVTVSA 116
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                                                                                                                                                                                                                                                                   Kopitar Jerala N,
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Pred. No. 1.6e-38;
6; Mismatches 8
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The present sequence represents Claim 3; Fig 6; 44pp; English.

the heavy chain variable region of the

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RESULT 10
AAW89173
ID AAW89
XX AAW89
XX
             anti-tumour immunity, to elicit an increased immune response to tumour CC associated antigen (TAA) and/or to induce an immune response to tumour CC wild-type forms of TAA in mammals. (A) is: (i) a monoclonal antibody CC (MAD) to TAA, or its fragment; (ii) a peptide based on a CDR (CC (Complementarity determining region) on the heavy or light chain of MAD (CC (able to elicit antibodies to TAA); or (iii) a DNA that encodes the CC variable (V) region of MAD, in a gene delivery vehicle. The present CC sequence represents the variable heavy chain sequence from anti-p53 MAD (C) antibodies (Ab) by immunising a mammal with a MAD directed to a method for generating sequence-specific, anti-CC domain containing a DNA-binding site of a DNA-binding protein. (A) is CC used to treat a wide variety of primary and metastatic cancers, CC particularly those where p53 is involved. Ab are used for diagnosis (e.g. to determine critical sequences in animal or plant breeding); to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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Best Local S
Matches 99
                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes the use of an immunogen (A) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Use of a monoclonal antibody to a anti-tumour immunity or elicit an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-070296/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anti-p53; monoclonal antibody 240; immune response; tumour associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anti-p53 monoclonal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 119 AA;
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Pred. No. 4.1e-39;
6; Mismatches 11
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determine parentage;
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antigen; metastatic cancer.
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RESULT 11
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Best Local S
Matches 99
                                     AAQ71396 codes for AAR60566 the antibody heavy chain region of murine-
human anti-carcinoembryonic antigen (CEA) chimeric antibody. Which can
used in in vitro immunoassays for the detection of CEA, and monitoring
tumour-associated antigen during therapy. It can also be used in vivo
diagnostically, or in therapy for the treatment of tumours associated
with colorectal and breast carcinomas, as well those of the
                                                                                                                                                                                           WPI; 199
N-PSDB;
                                 gastrointestinal
                                                                                                                             Claim 14; Page 53; 67pp;
                                                                                                                                                   Anti-carcinoembryonic antigen chimeric antibodies -
therapy of carcinoma, e.g. breast or colorectal carc
                                                                                                                                                                                                                                Gourlie BB,
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25-MAR-2003
25-APR-1995
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                                                                                                                                                                                                                                                                                                                                         01-SEP-1994.
                                                                                                                                                                                                                                                                                           16-FEB-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Anti-carcinoembryonic antigen chimeric human-murine; breast
                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , to isolate specific genes for DNA vaccination; in gene sequencing cloning; also possibly for activation of selected therapeutic genes plants, animals and humans. (A) induce an effective anti-tumour resg without causing harm to the patient. The method uses (A) to generate TAA by exploiting the anti-idiotype network
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 112 AA;
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DB; AAQ71396.
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                    nal tract, field.) (
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                   or in therapy for the treatment of tumours associated and breast carcinomas, as well those of the l tract, lung, overy and pancreas. (Updated on 25-MAR-; ield.) (Updated on 16-CCT-2003 to standardise OS field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                chimeric antibodies; CEAS; or colorectal carcinoma; h
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Pred. No. 8e-39;
4; Mismatches
                                                                                                                                                    or colorectal carcinoma
                                                                                                                                                                                                                            Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heavy chain
                                                                                                                                                                                                                                                                                                                                                                                                                                  carcinoma; heavy
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                  to standardise
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Query Match

82.3%;

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508;

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Sequence

124

AA;

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RESULT 12
ADH77307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cryptococcosis; sporothrychosis; blastomycosis; histoplasmosis; tuberculosis; mycobacteriosis; respiratory infection; scarlet figurumonia; impetigo; rheumatic fever; sepsis; septicaemia; cutaneous leishmaniasis; visceral leishmaniasis; keratitis; cystic fibrosis; typhoid fever; gastroenteritis; flu; influenza
                      The invention comprises a polypeptide which contains a part of the variable region of an anti-idiotypic antibody which recognizes the idiotope of an antibody specific for a yeast killer toxin. The polypeptide of the invention is useful for the treatment of microbial viral infections, such as: candidosis, aspergillosis, cryptcocccosis, sporothyychosis, blastomycosis, histoplasmosis, thrush, tuberculosis, sporothyychosis, blastomycosis, histoplasmosis, thrush, tuberculosis, mycobacteriosis, respiratory infections, scarlet fever, pneumonia,
                                                                                                                                                                                                                                                                                              New toxin-related polypeptides comprising a fragment of a variable region of an anti-idiotypic antibody which recognizes the idiotope of an antibody specific for a yeast killer toxin, useful for treating microbial or viral infections.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polonelli L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   variable region; anti-idiotypic antibody; yeast killer toxin; microbial infection; viral infection; candidosis; aspergillos
                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYSI-)
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                                                                                                                                                                                                                                         70pp; English
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4; Mismatches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
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RESULT 13
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Best Local S
Matches 98
                             This sequence is the heavy chain variable region of the antibody of the invention. The antibody is an anti-CEA (carcinoembryonic antigen) antibody (806.077 Ab). Host cells or transgenic organisms transformed with DNA encoding the antibody, are used to make the antibody or conjugate. The conjugate is used in a medicament suitable for intravenou administration. The conjugate can be used for cancer therapy, selectivel actions the conjugate can be used for in vivo or in vitro
                                                                                                                            Claim
                                                                                                                                                 Anti-carcinoembryonic antigen antibody and therapy of cancer.
                                                                                                                                                                                                                       Copley CG, Edge MD,
                                                                                                                                                                                                                                                                    04-MAY-1996;
14-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                 Anti-CEA antibody; carcinoembryonic antigen; 806.077 Ab; cancer therapy; cancer diagnosis; complementarity determining region; heavy chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW41387 standard; protein; 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       leishmaniasis, keratitis, cystic fibrosis, typhoid fever, gastroenteritis and haemolytic-uremic syndrome, flu, influenza or HIV/AIDS. The present amino acid sequence represents an anti-idiotypic antibody (H2O) of the
                                                                                                                                                                                      N-PSDB;
                                                                                                                                                                                                 WPI; 1997-558987/51
                                                                                                                                                                                                                                              (ZENE )
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                                                                                                                                                                                                                                                                                                                              13-NOV-1997.
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                                                                                                                                                                                                                                                                                                                                                                           Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                    antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TVTCSS 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APKFQGKTTLTADTSSNTAYLQLSSLTSEDTAVYYCNAWVYDGYSGDFYYYAMDYWGQGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC-----YGGTITF---AYWGQGT
                       of cancer
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97GB-00003103
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                                                                                                                                                                                                                                                                                                                                                                                                                                    806.077 heavy chain variable region
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77.8%;
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Pred. No. 5.9e-38;
7; Mismatches 11
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Query Match Best Local

Similarity

80

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Score Pred.

505; DB 2; No. 3e-38;

Length

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RESULT 14
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Best Local
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                                                                                                                                                                                                                                                                                                                                                         This sequence is the HuIgG2 Fd chain region of the antibody of the invention. The antibody is an anti-CEA (carcinoembryonic antigen) antibody (806.077 Ab). Host cells or transgenic organisms transformed with DNA encoding the antibody, are used to make the antibody or conjugate. The conjugate is used in a medicament suitable for intravenous administration. The conjugate can be used for cancer therapy, selectively killing tumour cells. The antibody can be used for in vivo or in vitro diagnosis of cancer. (Updated on 17-OCT-2003 to standardise OS field)
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14-FEB-1997;
                                                                                                                                                                                                                                                                                                                   Sequence 255 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 102-103; 208pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-carcinoembryonic antigen antibody 806.077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-APR-1997;
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02-JUN-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy of cancer.
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                                                                                                                                                                                                                                          Similarity
                                                                                                                                         EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPBQGLEWIGCIDPENGDTBY
APKFRGKATLTADSSSNTAYLHLSSLTSEDTAVYYCHVLIYAGYLAMDYWGQGTSVAVSS
                                     APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTITFAYMGQGTLVTVSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibody;
                                                                                                      EVQLQQSGAELVRSGASVKLSCTASGFNIKDNYMHWVKQRPEQGLEWIAWIDPENGDTEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anti-CEA antibody 806.077 HulgG2 Fd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTITFAYWGQGTLVTVSA 116
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                                                                                                                                                                                                               Conservative
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97GB-00003103.
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                                                                                                                                                                                                                                  81.8%;
80.8%;
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                                                                                                                                                                                                          Score 505; DB 2
Pred. No. 7e-38;
7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen; 806.077 Ab;
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    used for diagnosis

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                                                                                                                                                                                                          Gaps
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83

61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYC----YGGTITFAYWGQGTLVTVSA 116

82

APKFRGKATLTADSSSNTAYLHLSSLTSEDTAVYYCHVLIYAGYLAMDYWGQGTSVAVSS

Search completed: December Job time: 82.7286 secs

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RESULT 15
AAM82744
ID AAM827
XX AAM82
XX AAM82
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XX Conju
KW Conju
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KW prodit
XX PR
PN WO985
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                                                                                                                                  Query Match
Best Local
                                                                                               Matches
                                                                                                                                                                                                                                                                                                                   This sequence is a used in a method for obtaining a novel gene construct (A) which expresses, in cells of a mammal, a conjugate (B) of a cell-targeting group (I) and a heterologous prodrug-converting enzyme (II), and (B) is directed to leave the cell for selective localisation at a cell surface antigen (Ag) recognised by (I). Delivery of (A) to a target site, then administration of (III) is used for targeted release of cytotoxic drug, specifically for treating cancer but also inflammation such as rheumatoid arthritis. In situ generation of the targeting antibody increases selectivity, reducing side effects at normal tissue. The method is applicable to any antibody-directed enzyme prodrug therapy
                                                                                                                                                                                                                                  Sequence 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New gene construct expressing conjugate of targetting agent and prodrug-converting enzyme - useful for, e.g. targetted production of cytotoxic drug in vivo, especially for treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 16; Page 84-85; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-059700/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Emery SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-NOV-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9851787-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conjugate; cell targeting; cytotoxic drug; plasmid; fusion protein; prodrug-converting enzyme; cell surface antigen; treatment; cancer; inflammation; rheumatoid arthritis; antibody; prodrug therapy syste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ZENE ) ZENECA LTD.
                                                                                                                               Local
1 EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                               97;
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                                                                                                                               Similarity
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                                                                                               Conservative
                                                                                                                                                                                                                               AA;
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                                                                                                                        81.8%;
                                                                                        Score 505; DB Pred. No. 7.8e. 7; Mismatches
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                                                                                                                        DB 2;
.8e-38;
                                                                                                                                                           Length
                                                                                               Indels
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Regult
No.
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
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                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the score greater the and is derived be
                                                                                                                                                                                                                                                                                                                      Score
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seq_length: 2000000000
      507
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1: /cgn2_6/ptodata/2/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US08_NEW PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

15: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

17: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                          is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
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Match Length
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Gapop 10.0 ,
    December 29, 2004, 18:05:34 ; Search time 67.0678 Seconds (without alignments) 622.182 Million cell updates/sec
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    136
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                       17 US-10-774-076-4
US-09-968-851-38
US-10-032-482-7
US-09-564-329A-11
US-09-855-153-11
US-09-854-73-11
US-09-934-773-11
US-09-934-773-11
US-09-953-620-11
US-09-855-632-11
US-09-855-632-11
US-09-857-632-11
US-09-963-620-11
US-09-857-632-11
US-09-857-632-11
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                                                                                                           Sequence 38,
Sequence 7,
Sequence 11,
Sequence 11,
Sequence 11,
Sequence 11,
Sequence 11,
Sequence 11,
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                                                                 Sequence
Sequence
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                                              Sequence
                       Sequence
34, Appli
38, Appl
7, Appl
11, Appl
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| 45               | 44               | 43               | 42                | 41                | 40              | 39              | 38              | 37              | 36              | 35               | 34               | ω<br>ω           | 32               | 31               | 30               | 29                | 28               | 27               | 26               | 25              | 24               | 23               | 22              | 21              | 20              | 19              | 18               | 17               | 16               | 15               | 14                |
|------------------|------------------|------------------|-------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|-------------------|
| 491.5            | 491.5            | 491.5            | 491.5             | 491.5             | 491.5           | 491.5           | 491.5           | 495             | 495             | 495.5            | 495.5            | 495.5            | 495.5            | 495.5            | 495.5            | 495.5             | 495.5            | 495.5            | 495.5            | 495.5           | ū                | 495.5            | 496             | 496             | 496             | 496             | 496              | 502              | 505              | 505              | 507               |
| 79.7             | 79.7             | 79.7             | 79.7              | 79.7              | 79.7            | 79.7            | 79.7            | 80.2            | 80.2            | 80.3             | 80.3             | 80.3             | 80.3             | 80.3             | 80.3             | 80.3              | 80.3             | 80.3             | 80.3             | 80.3            | 80.3             | 80.3             | 80.4            | 80.4            | 80.4            | •               |                  | 81.4             | 81.8             | 81.8             | 82.2              |
| 240              | 240              | 240              | 240               | 117               | 117             | 117             | 117             | 241             | 240             | 248              | 238              | 238              | 238              | 238              | 238              | 119               | 117              | 117              | 117              | 117             | 117              | 117              | 124             | 124             | 124             | 124             | 124              | 556              | 255              | 120              | 136               |
| 17               | 17               | ø                | 9                 | 17                | 17              | 9               | 9               | 15              | 15              | æ                | 17               | 17               | 10               | 9                | 9                | œ                 | 17               | 17               | 17               | 10              | 9                | 9                | 10              | 10              | 9               | 9               | 9                | 10               | 9                | 9                | 15                |
| US-10-778-910-27 | US-10-482-630-27 | US-09-865-198-27 | US-09-976-787-28  | US-10-778-910-7   | US-10-482-630-7 | US-09-865-198-7 | US-09-976-787-7 | US-10-062-188-5 | US-10-062-188-8 | US-08-996-140-23 | US-10-778-910-28 | US-10-482-630-28 | US-09-798-689-21 | US-09-865-198-28 | US-09-976-787-29 | US-08-996-140-11  | US-10-778-910-22 | US-10-203-399B-7 | US-10-482-630-22 | US-09-798-689-7 | US-09-865-198-22 | US-09-976-787-23 | US-09-974-516-1 | US-09-974-498-1 | US-09-974-051-1 | US-09-974-052-1 | US-09-025-403A-1 | US-09-819-266-28 | US-09-910-059-19 | US-09-910-059-11 | US-10-446-542-11  |
| 27,              | e 27,            | 27,              | Sequence 28, Appl | Sequence 7, Appli | 0               | ,7              | ,               | ın              | θ,              | 23               | 28               | 28               | e 21             |                  | 29,              | Sequence 11, Appl | 22               | 7,               | 22               | .7              | 22,              | 23,              | 1,              | e<br>1,         | ۲,              | ŗ               | •                | e 28             | _                | 11, ,            | Sequence 11, Appl |

## ALIGNMENTS

US-10-774-076-4

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NUMBER OF SEQ ID NOS: 39
SOFTWARE: PatentIn version 3.2
SEQ ID NO 4
LENGTH: 116
TYPE: PRT
ORGANISM: mus sp.
US-10-774-076-4
RESULT 2
US-09-968-851-38
; Sequence 38, Ap
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                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 617; DB 17; Best Local Similarity 100.0%; Pred. No. 2.2e-48; Matches 116; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OF INVENTION: Psoriasis
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
                                                                                                               61
                                                                                                                                   61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYMGQGTLVTVSA 116
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                                                                                                                                                                                                                              EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
                                                                                                            APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA 116
                                                                                                                                                                                                EVOLOOSGAELVRSGASVXLSCTASGFNIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY
    Application US/09968851
                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                             Length 116;
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US-10-032-482-7
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                                                                                                                                                                                                  Sequence 7, Application US/10032482
Publication No. US20020197270A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/983,035
FILING DATE: 20-Feb-1998
APPLICATION NUMBER: PCT/FR96/01111
FILING DATE: 17-JUL-1996
APPLICATION NUMBER: FR 95/08729
FILING DATE: 19-JUL-1995
APPLICATION NUMBER: FR 95/08729
FILING DATE: 19-JUL-1995
ATTORNEY/AGENT INFORMATION:
NAME: Strauss, William L.
REGISTRATION NUMBER: 47,114
REFERENCE/DOCKET NUMBER: 03804.0142
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4400
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE: CHARACTERISTICS:
INFORMATION: ETELEPHONE: 202-408-4400
                                                                                                                                 APPLICANT: Cohen,
APPLICANT: ROTTE
APPLICANT: Wolko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Publication No. US20020193561A1 GENERAL INFORMATION:
LICANT: HERKET, JOHAnnes
LE OF INVENTION: IMMUNOSENIC COMPOSITIONS FOR INDUCTION OF ANTI-TUMOR
LE OF INVENTION: IMMUNITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/968,851
FILING DATE: 03-Oct-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: 120005-3315

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: CONSEILLER, EMMANUEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: P53
                                                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EVQLQQSGAELVRSGASVKLSCTASGENIKDYYIHWVKQRPEQGLEWIGCIDPENGDTEY 60
                                                                                        Wolkowicz, Roland
RUIZ, Pedro
EREZ-ALON, Neta
                                                                                                                                                                                                                                                                                                                                               APKFQGKATMTADTSSNTAYLQLSSLASEDTAVYYCNFYGDALD--YWGQGTTVTVSS 118
                                                                                                                                                                                                                                                                                                                                                                                  APNFQGRATMTADISSNTAYLQLSSLTSEDTAVYYC--YGGTITFAYWGQGTLVTVSA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                   QVQLQEŚGAELVGŚGASVKLŚCTASGFNIKDYYMHWVKQRPEQGLEWIGWIDPENGDTEY 62
                                                                                                                                                           ROTTER, Varda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 535 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1300 I Street, NW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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84.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAURENT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 516; DB 9; Length 535; Pred. No. 1.6e-38; 6; Mismatches 8; Indels
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; TYPE: PRT; ORGANISM: SCID Mice US-09-564-329A-11
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; ORGANISM: Mus musculus
US-10-032-482-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/359,326
PRIOR FILING DATE: 1999-07-20
PRIOR PELICATION NUMBER: 08/814,279
PRIOR APPLICATION NUMBER: 08/071,141
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR FILING DATE: 1998-02-13
                                                                                             SEQ ID NO 1
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CURRENT APPLICATION NUMBER: US/10/032,482
CURRENT FILING DATE: 2002-01-02
PRIOR APPLICATION NUMBER: US/09/445,602
PRIOR PILING DATE: 2001-01-24
PRIOR PPLICATION NUMBER: PCT/IL98/00266
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: IL 121041
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 25
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PRIOR FILING DATE: 1999-02-17
PRIOR APPLICATION NUMBER: 09/308,503
PRIOR FILING DATE: 1999-05-25
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Best Local Similarity 86.8%;
Matches 99; Conservative
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                                                                                                                                       NUMBER OF SEQ ID NOS: 27
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TITLE OF INVENTION: PSCA: PROSTATE STEM CE:
FILE REFERENCE: 30435.54US14
CURRENT APPLICATION NUMBER: US/09/564,329A
CURRENT FILING DATE: 2000-05-03
PBTOE ABBLICATION TURES
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APPLICANT: Witte, Owen N.
APPLICANT: Saffran, Douglas
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                                                                                                               PatentIn Ver.
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Pred. No. 8.8e-39;
4; Mismatches
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RESULT 6
US-09-854-811-11
; Sequence 11, Application US/09854811
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US-09-855-153-11
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PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/359,326
PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR FILING DATE: 1997-03-10
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR FILING DATE: 1998-01-12
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SEQ ID NO 11
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Best Local Similarity
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APPLICANT: Witte, Owen N.
APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN
FILE REFERENCE: 30435-540514
CURRENT PEPLICATION NUMBER: US/09/855,153
CURRENT FILING DATE: 2001-05-14
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PRIOR FILING DATE: 1998-12-02
PRIOR APPLICATION NUMBER: 09/251,835
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PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: 60/113,230
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PRIOR APPLICATION NUMBER: 60/120,536
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ilarity 84.5%;
Conservative
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Pred. No. 2.5e-38;
4; Mismatches 10;
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4; Mismatches
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ches 10;
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CURRENT FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: 09/564,329
PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/359,326
PRIOR FILING DATE: 1999-07-20
PRIOR FILING DATE: 1999-07-20
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR PILING DATE: 1997-03-10
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SOFTWARE:
SEQ ID NO 1
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                                       PRIOR FILING DATE: 1993-0. 7. PRIOR APPLICATION NUMBER: 09/308,503 PRIOR FILING DATE: 1999-05-25
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PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/359,326
PRIOR FILING DATE: 1999-07-20
NUMBER OF SEQ ID NOS: 27
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TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF
FILE REFERENCE: 30435.54USI4
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CURRENT FILING DATE: 2001-05-14
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TYPE: PRT
ORGANISM: SCID Mice
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FILING DATE: 1998-12-02
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FILING DATE: 1998-02-13
APPLICATION NUMBER: 60/113,230
FILING DATE: 1998-12-21
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Similarity 84.5%;
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Pred. No. 2.5e-38;
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                                                                                                                                      Query Match
Best Local Similarity 84.5
98; Conservative
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CURRENT FILING DATE: 2001-09-26
PRIOR APPLICATION NUMBER: 09/564,329
PRIOR FILING DATE: 2000-05-03
PRIOR PRILING DATE: 1999-07-20
PRIOR FILLING DATE: 1999-07-20
PRIOR FILLING DATE: 1999-07-20
PRIOR FILLING DATE: 1997-03-10
PRIOR FILLING DATE: 1997-03-10
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR FILLING DATE: 1998-01-12
PRIOR FILLING DATE: 1998-01-12
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US-09-963-620-11
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US-09-934-773-11
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SEQ ID NO 11
LENGTH: 136
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Patent No. U
                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/308,503
PRIOR FILING DATE: 1999-05-25
NUMBER OF SEQ ID NOS: 27
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APPLICANT: Witte, Owen N.
APPLICANT: Saffran, Douglas C.
APPLICANT: SAFfran, Douglas C.
TITLE OF INVENTION: PROSTATE STEM CELL ANTIGEN AND USES THEREOF
FILE REFERENCE: 30435.54USI4
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Best Local :
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FILING DATE: 1999-02-17
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APPLICATION NUMBER: 09/203,939
FILING DATE: 1998-12-02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1999-03-16
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FILING DATE: 1998-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/124,658
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APPLICATION NUMBER: 60/120,536
                         61 APNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA 116
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VPKFQGKATMTADIFŚNTAYLHLSSLTSEDTAVYYCKTG----GFWGQGTLVTVSA 125
                                                                        EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVKQRDEQGLEWIGCIDPENGDTEY
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                                                                                                                                                Score 507; DB 9; Length 136;
Pred. No. 2.5e-38;
4; Mismatches 10; Indels
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APPLICANT: SAFÉTAN, DOUGHAS C.

I TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF FILE REFERENCE: 30435.549514

CURRENT APPLICATION NUMBER: US/09/855,632

CURRENT APPLICATION NUMBER: 09/564,329

PRIOR APPLICATION NUMBER: 09/369,326

PRIOR PILING DATE: 1090-05-03

PRIOR PILING DATE: 1999-07-20

PRIOR PILING DATE: 1997-03-10

PRIOR APPLICATION NUMBER: 06/011,141

PRIOR APPLICATION NUMBER: 60/071,141

PRIOR PILING DATE: 1998-01-12

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/074,675

PRIOR APPLICATION NUMBER: 60/013,230

PRIOR APPLICATION NUMBER: 60/013,230

PRIOR APPLICATION NUMBER: 60/013,230
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Sequence 11, Application US/10225784
Publication No. US20030113820A1
GENERAL INFORMATION:
APPLICANT: Reiter, Robert B.
APPLICANT: Saffran, Douglas C.
APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF FILE REFERENCE: 30435.54USI4
CURRENT FILING DATE: 2002-08-21
PRIOR APPLICATION NUMBER: US/10/225,784
CREENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: US/359,326
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US-09-855-632-11
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SOFTWARE: Pater
SEQ ID NO 11
FRIGHT: 136
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US-09-855-632-11
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Publication No. US200;
GENERAL INFORMATION:
APPLICANT: Reiter, R.
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PRIOR FILING DATE: 1999-02-17
PRIOR APPLICATION NUMBER: 09/308,503
PRIOR FILING DATE: 1999-05-25
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DR FILLING DATE: 1999-02-17

DR APPLICATION NUMBER: 60/124,658

DR FILLING DATE: 1999-03-16

DR APPLICATION NUMBER: 09/038,261

DR APPLICATION NUMBER: 09/203,939

DR APPLICATION NUMBER: 09/203,939
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No. US20030113818A1
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ilarity 84.5%;
Conservative
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Pred. No. 2.5e-38;
4; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 136;
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APPLICATION NUMBER: 08/814,279 FILING DATE: 1997-03-10

FILING

1999-07-20

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; TYPE: PRT
; ORGANISM: SCID Mice
US-10-225-784-11
                                                        CURRENT FILING DATE: 2002-08-20
PRIOR APPLICATION NUMBER: US/09/359,326
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR APPLICATION NUMBER: 06/071,141
PRIOR PILING DATE: 1998-01-12
PRIOR PILING DATE: 1998-01-12
PRIOR PILING DATE: 1998-02-17
PRIOR APPLICATION NUMBER: 60/113,230
PRIOR APPLICATION NUMBER: 60/120,536
PRIOR PILING DATE: 1999-02-17
PRIOR APPLICATION NUMBER: 60/120,536
PRIOR PILING DATE: 1999-03-16
PRIOR APPLICATION NUMBER: 60/124,658
PRIOR APPLICATION NUMBER: 60/124,658
PRIOR APPLICATION NUMBER: 09/038,261
PRIOR APPLICATION NUMBER: 09/038,261
PRIOR APPLICATION NUMBER: 09/203,939
PRIOR PILING DATE: 1998-12-02
PRIOR APPLICATION NUMBER: 09/203,939
PRIOR PILING DATE: 1998-12-02
PRIOR APPLICATION NUMBER: 09/251,835
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CURRENT APPLICATION NUMBER: US/10/224,720
CURRENT FILING DATE: 2002-08-20
Remaining
NUMBER OF
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TITLE OF INVENTION: PSCA: PROSTATE STEM CELL
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NUMBER OF SEQ ID NOS: 27
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                                          PRIOR FILING DATE: 1999-02-17
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Local Similarity 84.5%;
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APPLICATION NUMBER: 09/203,939
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EVQLQQSGAELVRSGASVKLSCTASGFNIKDYYIHWVNQRPDQGLEWIGWIDPENGDTEF
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Application data removed - NOS: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Robert E.
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Pred. No. 2.5e-38;
4; Mismatches 10;
                     See File Wrapper or PALM
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US-10-225-779-11
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; TYPE: PRT
; ORGANISM: SCID Mice
US-10-224-720-11
                                                                                                                                           Query Match
Best Local S
Matches 98
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Publication No.
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/225,779
CURRENT FILING DATE: 2002-08-21
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TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF
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NUMBER OF SEQ ID
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PRIOR FILING DATE: 1997-03-10
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OR FILLING DATE: 1998-02-13
OR APPLICATION NUMBER: 60/113,230
OR FILLING DATE: 1998-12-21
OR APPLICATION NUMBER: 60/120,536
OR FILING DATE: 1999-02-17
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FILING DATE: 1998-03-10
APPLICATION NUMBER: 09/203,939
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FILING DATE: 1998-01-12
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                    61 ADNFQGRATMTADTSSNTAYLQLSSLTSEDTAVYYCYGGTITFAYWGQGTLVTVSA 116
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74 VPKFQGKATMTADIFSNTAYLHLSSLTSEDTAVYYCKTG----GFWGQGTLVTVSA
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Vo. US20030153016A1
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Pred. No. 2.5e-38;
4; Mismatches 10;
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Pred. No. 2.5e-38;
4; Mismatches 10;
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PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/359,326
PRIOR FILING DATE: 1999-07-20
PRIOR PRIOR PAPLICATION NUMBER: 08/814,279
PRIOR APPLICATION NUMBER: 08/814,279
PRIOR FILING DATE: 1997-03-10
PRIOR APPLICATION NUMBER: 60/071,141
PRIOR FILING DATE: 1998-01-12
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR APPLICATION NUMBER: 60/074,675
PRIOR FILING DATE: 1998-02-13
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Publication No. US20040018571A1
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                                             APPLICANT: Reiter, Robert B.
APPLICANT: Witte, Owen N.
APPLICANT: Witte, Owen N.
APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF FILE REFERENCE: 30435.54USI4
CURRENT APPLICATION NUMBER: US/10/446,542
CURRENT FILING DATE: 2003-05-27
PRIOR APPLICATION NUMBER: US/09/855,153
PRIOR FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: US/564,329
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NUMBER OF SEQ ID NOS: 27
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APPLICANT: Saffran, Douglas C.
TITLE OF INVENTION: PSCA: PROST
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CURRENT APPLICATION NUMBER: US/10/374,381
CURRENT FILING DATE: 2003-02-25
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TYPE: PRT
ORGANISM: SCID Mice
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APPLICATION NUMBER: 09/359,326
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FILING DATE: 1999-03-16
APPLICATION NUMBER: 09/038,261
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84.5%; Pred. No. 2.5e-38;
tive 4; Mismatches 10
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LENGTH: 120
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Best Local
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APPLICANT: Edge, Michael Derek
APPLICANT: Edge, Michael Derek
APPLICANT: Edge, Michael Derek
APPLICANT: Emery, Stephen Charles
TITLE OF INVENTION: Monoclonal Antibody to CEA, Conjugates Comprising Said Antibody,
TITLE OF INVENTION: Their Therapeutic use in an Adept System
FILE REFERENCE: 1991-209
CURRENT APPLICATION NUMBER: US/09/910,059
CURRENT FILING DATE: 1998-10-29
PRIOR FILING DATE: 1998-10-29
PRIOR FILING DATE: 1997-04-29
PRIOR APPLICATION NUMBER: GB 9703103.3
PRIOR FILING DATE: 1997-02-14
PRIOR PRIOR PATION NUMBER: GB9609405.7
PRIOR FILING DATE: 1997-02-14
PRIOR FILING DATE: 1996-05-04
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ORGANISM: SCID Mice
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OR FILING DATE: 1998-02-13
OR APPLICATION NUMBER: 60/113,230
OR FILING DATE: 1998-12-21
OR APPLICATION NUMBER: 60/120,536
OR FILING DATE: 1999-02-17
OR APPLICATION NUMBER: 60/124,658
OR FILING DATE: 1999-03-16
OR APPLICATION NUMBER: 60/038,261
OR FILING DATE: 1998-03-10
OR FILING DATE: 1998-03-10
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APPLICATION NUMBER: 60/071,141
FILING DATE: 1998-01-12
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llarity 80.8%;
Conservative
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                                             Score 505; DB 9;
Pred. No. 3.3e-38;
7; Mismatches 12
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Pred. No. 2.5e-38;
                                                                                       Length 120
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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1: geneseqp1980s:*
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563
1 DIKMTQSPSSMYAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| 25                | 24                 | 23                 | 22                 | 21       | 20                 | 19                 | 18       | 17                 | 16                 | 15                 | 14                 | 13                 | 12       | 11       | 10                 | 9                  | 8                  | 7                  | 6                  | 5                  | 4                  | ω                  | 2                  | <b>-</b> | Regult<br>No.  |
|-------------------|--------------------|--------------------|--------------------|----------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|----------------|
| 525               | 527                | 527                | 529                | 531      | 531.5              | 534                | 534      | 541                | 541                | 541                | 546                | 546                | 548      | 551      | 551                | 551                | 551                | 551                | 551                | 554                | 554                | 554                | 556                | 556      | Score          |
| 93.3              | 93.6               | 93.6               | 94.0               | •        | 94.4               | 94.8               | 94.8     | •                  | 96.1               | 96.1               | 97.0               | 97.0               | 97.3     | 97.9     | 97.9               | 97.9               | 97.9               | 97.9               | 97.9               | 98.4               | 98.4               | 98.4               | 98.8               | 98.8     | Query<br>Match |
| 216               | 107                | 107                | 106                | 107      | 215                | 107                | 107      | 129                | 107                | 107                | 246                | 127                | 214      | 379      | 360                | 358                | 358                | 355                | 355                | 237                | 237                | 237                | 107                | 107      | Length         |
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| AAW15935          | ABG31430           | AAR92083           | AAW65052           | AAW23956 | AAR53803           | ABR83156           | ABG74702 | AAR30880           | ADI01167           | AAW58505           | AAB86037           | AAR95946           | AAW27089 | AAW35126 | AAW35128           | AAW35130           | AAW35127           | AAW35129           | AAW35125           | ADD48668           | ADD47098           | ADE57549           | ADL23067           | ADE85729 | ID             |
| Aaw15935 Antibody | Abg31430 Amino aci | Aar92083 Murine 13 | Aaw65052 Human L c | Mus      | Aar53803 FAB light | Abr83156 Mu007 ant |          | Aar30880 pXOM2. 3/ | Adi01167 Murine mo | Aaw58505 H65 prote | Aab86037 Murine an | Aar95946 HNK-20 va | <u>x</u> | ₽.       | Aaw35128 R. pipien | Aaw35130 R. pipien | Aaw35127 R. pipien | Aaw35129 R. pipien | Aaw35125 R. pipien | Add48668 Human Pro | Add47098 Human Pro | Ade57549 Human Pro | Adl23067 Human Eph | 9 Human  | Description    |

| FXXXXXXXX  | 9 9 9 X X X X 2 9 X 3   | X   | 1 X A X P X B X P X P X B X B X B X B X B X B   | RES  |  |
|--|---|---|---|--|--|
| body.  body.  losure; SEQ ID NO 33; 173pp present invention describes present invention describes present invention describes to the body (I) that is an EphA2 a botype inhibiting antibody,   | th MS, Carles-Kinch K, Kie<br>2004-012002/01.<br>DB; ADE85737.<br>Tting cancer or a non-cancer<br>mma, psoriasis, inflammatory<br>prises administering to the | )0309<br>10V-2<br>1AY-2<br>1AY-2<br>1PR-2 | ADE85729  ID ADE85729;  XX  AC ADE85729;  XX  DT 12-FEB-2004 (first entry)  XX  DX  DT 12-FEB-2004 (first entry)  XX  DX  Entry  Entry | 525 93.3 236 2 AAR<br>525 93.3 236 2 AAR<br>525 93.3 236 2 AAR<br>523 92.9 104 2 AAR<br>523 92.7 142 2 AAR<br>522 92.7 142 2 AAR<br>522 92.7 142 2 AAR<br>522 92.7 142 2 AAR<br>522 92.7 142 5 AAO<br>522 92.7 142 7 ADC<br>523 92.3 258 2 AAW   | 6 525 93.3 228 2<br>7 525 93.3 228 2<br>8 525 93.3 228 2<br>9 525 93.3 235 2<br>6 526 93.3 236 2 |
| n.  I for treating cancer or a religious of the stream of the same | ner P, Langermann S;  hyperproliferative cell disease (e.g. bowel disease or restenosis) in a patient patient amount of an EphA2                              |   | AA.  n protein SEQ ID NO:33.  disease; EphA2 antibody; atic; antiasthmatic; antipsoriatic; spiratory; gene therapy; asis; inflammatory bowel disease; selial restenosis; Crohn's disease; sease; human.   | 14703 14699 Aar14699 Aar14690 Ar14700 Ar19154 Ar198410 Ar198410 Ar198410 Ar198410 Ar19866 Ar19866 Ar19866 Ar19866 Ar198672 Ar29672 Ar29672 Ar26728 Ar26728 Ar14016 Ar29611 Ar2961 Ar29611 Ar29 | Aarl4704<br>Aarl4789<br>Aarl4694<br>Aarl4702   |

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EphA2 agonistic antibody or

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RESULT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Sim
Matches 105;
                                                                                                                                  10-MAY-2002; 2002US-037936BP.
14-OCT-2002; 2002US-0418204P.
03-APR-2003; 2003US-0460358P.
                                                                                                                                                                                                                       12-MAY-2003; 2003WO-US015046
                                                                                                                                                                                                                                                                     19-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human EphA2 antibody VL chain.
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               2004-180531/17
                                                           SM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DÍKMTÓS PSSMÝ A SLÍGER VTÍ TICKA SÓD I NNÝLS W FOOK PGKSPKTLI V RANKL V DGV PS
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ilarity 98.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                      EphA2; variable light chain; VL chain; cancer;
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Pred. No. 5e-37;
2; Mismatches
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뭐 Ş 片 8

cancer, e.g.

breast, lung,

prostate,

or skin cancer,

The invention discloses a composition comprising two or more isolated rat or human polynucleotides or a polynucleotide which represents a fragment, derivative or allelic variation of the nucleic acid sequence. Also

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RESULT 3
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Matches
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                                                                                              Claim 1; Page;
                                                                                                                               New composition comprising two or more isolated polypeptides, useful for preparing a medicament for treating pain in an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                  14-AUG-2001; 2001US-0312147P.
01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
                                                                                                                                                                                                                        WPI; 2003-268312/26.
GENBANK; S65921.
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(FARB )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; pain; neuronal tissue; gene therapy; spinal segmental nerve injury; chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
                                                                                                                                                                                                                                                                                                 Woolf C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003016475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method of treating cancer (fully or partially refractory to a first treatment), comprising administering an EphA2 antibody that is an EphA2 agonistic antibody or an exposed EphA2 epitope antibody. The method is useful for treating, managing or preventing cancer (e.g. lung, colon, prostate, breast or skin cancer), particularly metastatic cancer. The method may be used not only in untreated patients but also in the treatment of patients but also in the treatment of patients partially or refractory to current standard and experimental cancer therapies, e.g. chemotherapies or hormonal therapies, to improve the efficacy of such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADE57549 standard; protein;
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                                                                                                                                                                                                                                                                                          D'urso D,
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Pred. No. 5
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                                                                                                                                                                                                                                                                                          Costigan
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RESULT 4
ADD47098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC claimed are a vector comprising the novel polynucleotide, a host cell C comprising the vector, a method for identifying a nucleotide sequence CC which is differentially regulated in an animal subjected to pain and a CC kit to perform the method, an array, a method for identifying an agent that increases or decreases the expression of the polynucleotide sequence CC that is differentially expressed in neuronal tissue of a first animal CC subjected to pain, a method for identifying an agent CC compound that regulates the activity of one or more of the compound that regulates the activity of one or more of the CC polynucleotides, a method for producing a pharmaceutical composition, a method for identifying a compound which regulates the compound that regulates the activity of one or more of the composition, a method for identifying a compound useful in treating compound to a pharmaceutical composition comprising the one or more contivity in an animal of one or more of the polypucleotides given in the compound apharmaceutical composition comprising the one or more conjugation, a method for identifying a compound useful in treating polypoptides or their antibodies. The polynucleotide or the compound that composition comprising the one or more conjugates or their antibodies. The polynucleotide or the compound that composition comprising a medicament for treating pain (e.g. spinal segmental nerve injury (CNung), chronic constriction conjury (COI) and spared nerve injury (SNI)) in an animal (e.g. gene conjuctivity is useful for proparing a medicament for treating the sequence data for this patent did not form part of the printed confusion, but was obtained in electronic form directly from WIPO at CC fro, wigo. Int. Publy published port sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
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01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
GENBANK; S65921
                                                                                                                                                                                                                                                                                                                                                                              14-AUG-2002; 2002WO-US025765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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                             WPI; 2003-268312/26
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                                                                                           Woolf C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003016475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pain; neuronal tissue; gene therapy;
segmental nerve injury; chronic constriction injury; CCI;
nerve injury; SNI; Chung.
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                                                                                                                                                             GEN HOSPITAL
BAYER AG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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                                                                                        D'urso D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.4%;
ilarity 99.1%;
Conservative
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                                                                                              Befort
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Pred. No. 1.6e
O; Mismatches
                                                                                              Costigan M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .6e-36;
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CC claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence CC which is differentially regulated in an animal subjected to pain and a CC kit to perform the method, an array, a method for identifying an agent CC that increases or decreases the expression of the polynucleotide sequence CC that is differentially expressed in neuronal tissue of a first animal Subjected to pain, a method for identifying a compound which regulates the expression of a polynucleotide sequence which is differentially compound that regulates the activity of one or more of the composition, a method for identifying a compound that regulates the activity of one or more of the polynucleotides, a method for producing a pharmaceutical composition, a contivity in an animal of one or more of the polynucleotides, a method for identifying a compound useful in treating composition activity in an animal of one or more of the polynucleotides given in the specification, a method for identifying a compound useful in treating paln and a pharmaceutical composition comprising the one or more conjury (conjury is useful for preparing a medicament for treating paln (e.g. spinal segmental nerve injury (Chung), chronic constriction conjury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene the sequence data for this patent did not form part of the printed specification, but was obtained in electronic form directly from WIPO at the specification, but was obtained in electronic form directly from WIPO at the printed in the composition electronic form directly from WIPO at the specification, but was obtained in electronic form directly from WIPO at the specification and contained in electronic form directly from WIPO at the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention discloses a composition comprising two or more isolated rat or human polynucleotides or a polynucleotide which represents a fragment, derivative or allelic variation of the nucleic acid sequence. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page; 1017pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New composition comprising two or more isolated polypeptides, useful preparing a medicament for treating pain in an animal.
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                     RFSGSGSQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                      DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                         DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPRTFGGGTKLEIK
                                                                           82
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밁 S

Matches 106; Query Match Best Local :

Similarity

98.4**%**; 99.1**%**;

Score 554; DB 7; Pred. No. 1.6e-36;

Length 237 Indels

0

Gaps

0

Conservative

0

Mismatches

Sequence 237

Ä

ftp.wipo.int/pub/published\_pct\_sequences.

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spinal
14-AUG-2001; 2001US-0312147P.
01-NOV-2001; 2001US-0346382P.
                           14-AUG-2002; 2002WO-US025765
                                                               WO2003016475-A2
                                                                                 Homo sapiens
                                                                                                                     Human;
                                                                                                                                                         29-JAN-2004
                                                                                                                                                                                             ADD48668 standard; protein; 237 AA.
                                                                                                                                       Human Protein S65921, SEQ ID
                                                                                                           pain; neuronal tissue; gene therapy;
segmental nerve injury; chronic constriction injury; CCI;
                                                                                                  nerve
                                                                                                  injury;
                                                                                                                                                         (first entry)
                                                                                                  SNI; Chung.
                                                                                                                                      NO 14374
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RESULT 6
AAW35125
ID AAW3
XX AAW3
AC AAW3
XX 20-A
XX PAR R. F
XX RNag
KW RNag
KW tumc
XX tumc
XX Rang
OS Rang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC kit to perform the method, an array, a method for identifying an agent CC that increases or decreases the expression of the polynucleotide sequence CC that is differentially expressed in neuronal tissue of a first animal CC subjected to pain, a method for identifying a compound which regulates CC the expression of a polynucleotide sequence which is differentially CC expressed in an animal subjected to pain, a method for identifying a CC compound that regulates the activity of one or more of the CC compound that regulates the activity of one or more of the CC polynucleotides, a method for producing a pharmaceutical composition, a CC method for identifying a compound or small molecule that regulates the CC specification, a method for identifying a compound useful in treating CC pain and a pharmaceutical composition comprising the one or more CC modulates its activity is useful for preparing a medicament for treating CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction CC injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene CC therapy). The sequence presented is a human protein (shown in Table 2 of the specification) which is differentially expressed during pain. Note: Specification, but was obtained in electronic form directly from WIPO at CC fith. Wino introhybriblished references.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Sin
Matches 106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
    Rana pipiens Synthetic.
                                                      RNase A; ribonuclease; cytotoxic; onconase; nOnc; immunofusion; tumour cell growth; frog.
                                                                                                             R. pipiens recombinant RNase
                                                                                                                                                        20-APR-1998
                                                                                                                                                                                              AAW35125;
                                                                                                                                                                                                                                 AAW35125 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or human polynucleotides or a polynucleotide which represents a fragme derivative or allelic variation of the nucleic acid sequence. Also claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence which is differentially regulated in an animal subjected to pain and a kit to perform the method, an array, a method for identifying an agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page; 1017pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New composition comprising two or more isolated polypeptides, useful preparing a medicament for treating pain in an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENBANK;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-NOV-2001; 2001US-0333347P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention discloses a composition comprising two or
                                                                                                                                                                                                                                                                                                                                83
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                                                                                                                                                                                                                                                                                                                                                                                                         23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                      RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPRTFGGGTKLEIK 129
                                                                                                                                                                                                                                                                                                                                            RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                               DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANKLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                          DIKYTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237 AA;
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                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                 protein; 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.4%;
99.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                         rOnc fusion protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 554; DB 7; I
Pred. No. 1.6e-36;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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RESULT 7
AAW35129
ID AAW3
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 104;
         21-FEB-1996;
                                    19-FEB-1997;
                                                                                                                                                             RNase A; ribonuclease; cytotoxic; onconase; nOnc; immunofusion;
                                                                                                                                                                                         R. pipiens recombinant RNase rOnc fusion protein
                                                             28-AUG-1997
                                                                                        WO9731116-A2
                                                                                                                 Rana pipiens
Synthetic.
                                                                                                                                                                                                                          20-APR-1998
                                                                                                                                                                                                                                                   AAW35129;
                                                                                                                                                                                                                                                                         AAW35129 standard; protein; 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequences AAW35125 to AAW35135 represent recombinant fusion proteins (rCOnc) which are modifications of the RNase Onconase (RTM) (nOnc). Such novel ribonuclease molecules are highly cytotoxic and can be used alone or to form chemical conjugates or to target recombinant immunofusions. They are used particularly for decreasing tumour cell growth. They can also be used for cell separation in vitro by selectively killing unwanted types of cells, e.g. in bone marrow prior to transplantation into a patient undergoing marrow ablation by radiation, or for killing leukaemia cells or T-cells that would cause graft versus host disease. The toxins can also be used to selectively kill unwanted cells in culture. The new ribonucleases have increased cytotoxic activity compared to nonc and also lower immunogenicity in humans
                                                                                                                                                        tumour cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 355 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ribonuclease molecules based on native Onconase - used for killing cells, particularly tumour cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 67; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-435168/40.
N-PSDB; AAT94963.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rybak SM,
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                                                                                                                                                      growth;
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           96US-0011800P
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97.2%;
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Pred. No. 4e-36;
1; Mismatches
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RESULT 8
AAW35127
ID AAW3
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AC AAW3
DT 20-A
XX RNaB
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XX Synt
XX Synt
XX W097
XX W19-F
PR 19-F
PR 19-F
PR 19-F
PR 19-F
PR 19-F
XX USS
XX WPI,
PI Rybe
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Ribonuclease molecules based particularly tumour cells.
                                                                                                                                                                                                                                                                                                                         Rana pipiens.
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                                                                                                                                                                                                                                                                                                                                                         ribonuclease; cytotoxic; onconase; nOnc; immunofusion;
ell growth; frog.
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                                                                                                   Newton DL,
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Sequences AAW35125 to AAW35135 represent recombinant fusion proteins (rOnc) which are modifications of the RNase Onconase (RTW) (nOnc). Such novel ribonuclease molecules are highly cytotoxic and can used alone or to form chemical conjugates or to target recombinant immunofusions. They are used particularly for decreasing tumour cell growth. They can also be used for cell separation in vitro by selectively killing unwant.
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                                                                                                                                  Ribonuclease molecules based particularly tumour cells.
                                                                                                                                                                                                                                                                                                                                                                                                      Rana pipiens.
Synthetic.
                                                                                                      Disclosure; Page 72;
                                                                                                                                                                               WPI; 1997-435168/40
N-PSDB; AAT94968.
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                                                                                                                                                                                                                         Newton DL,
                                                                                                                                                                                                                                                      DEPT HEALTH & HUMAN
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Pred. No. 4e-36;
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RESULT 10
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DT 20-AP
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                                                           Sequences AAW35125 to AAW35135 represent recombinant fusion proteins (ronc) which are modifications of the RNase Onconase (RTM) (nOnc). Such novel ribonuclease molecules are highly cytotoxic and can be used alone or to form chemical conjugates or to target recombinant immunofusions. They are used particularly for decreasing tumour cell growth. They can also be used for cell separation in vitro by selectively killing unwanted types of cells, e.g. in bone marrow prior to transplantation into a patient undergoing marrow ablation by radiation, or for killing leukaemia cells or T-cells that would cause graft versus host disease. The toxins can also be used to selectively kill unwanted cells in culture. The new ribonucleases have increased cytotoxic activity compared to nonc and also
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-0011800P
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97.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                on native
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Pred. No. 4e-36;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wlodawer
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Sequence 360

S 밁 S

RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107

DIKWTQSPSSMYASLGERVTFTCKASQDINNYLCWFQQKPGKSPKTLIYRANRLVDGVPS DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKDGKSPKTLIYRANRLYDGVPS

202 60 Matches Query Match

Local 104;

Similarity

97.9%;

Conservative

1;

Score 551; DB 2; Pred. No. 4.3e-36; 1; Mismatches 2

Length 379;

Indels

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Сарв

lower immunogenicity

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RESULT 11
AAW35126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                           Sequences AAW35125 to AAW35135 represent recombinant fusion proteins (ronc) which are modifications of the RNase Onconase (RTM) (nonc). Such novel ribonuclease molecules are highly cytotoxic and can be used alone or to form chemical conjugates or to target recombinant immunofusions. They are used particularly for decreasing tumour cell growth. They can also be used for cell separation in vitro by selectively killing unwanted types of cells, e.g. in bone marrow prior to transplantation into a patient undergoing marrow ablation by radiation, or for killing leukaemia cells or T-cells that would cause graft versus host disease. The toxins can also be used to selectively kill unwanted cells in culture. The new ribonucleases have increased cytotoxic activity compared to nonc and also
Sequence
                                                                                                                                                                                                                                 Ribonuclease molecules based on native particularly tumour cells.
                                                                                                                                                                                                       Disclosure; Page 68; 90pp;
                                                                                                                                                                                                                                                                                        WPI; 1997-435168/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rana pipiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                         21-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                      19-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                28-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R. pipiens
                                                                                                                                                                                                                                                                                                                                           (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9731116-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour cell growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNase A; ribonuclease; cytotoxic; onconase; nOnc; immunofusion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW35126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW35126 standard; protein;
                          immunogenicity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
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379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DIKMTOSPSSMYASLGERVTFTCKASQDINNYLCWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DIKWTQSPSSMYASLGERVTITCKASQDINSYLSWFQQXDGKSPKTLIYRANRLYDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLBIK 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recombinant
AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                         96US-0011800P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.9%;
97.2%;
                                                                                                                                                                                                                                                                                                                 Boque L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RNase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rOnc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 551; DB 2;
Pred. No. 4.1e-36;
1; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                 Wlodawer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fusion protein
                                                                                                                                                                                                                                        Onconase - used for killing cells,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
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                                                                                                  Query Match
Best Local S
Matches 104
                                                                                                                                                                                    The present sequence represents the mouse monoclonal antibody B9 light chain (B9L), which binds specifically to human blood apolipoprotein B-100. The nucleic acid can be used in a method for the preparation of a reconstituted antibody which specifically binds human plasma apolipoprotein B-100. The antibody can be used as a reagent for determining the concentration of human plasma apolipoprotein B-100 in a sample. The antibody is also useful in a drug composition for selectively removing arteriosclerotic lipoproteins containing human plasma apolipoprotein B-100.
                                                                                                                                                    Sequence 214 AA;
                                                                                                                                                                                                                                                                                                                                 DNA encoding mouse antibody binding human plasma apo-lipoprotein B-100 useful for removing arteriosclerotic lipoprotein(s).
                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human plasma apolipoprotein B-100; arteriosclerotic lipoprotein;
antibody; Fab.
                                                                                                                                                                                                                                                                                                        Claim 4; Fig 6; 17pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                      02-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JP09154587-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse monoclonal antibody B9 light chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW27089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW27089 standard; protein;
                                                                                                                                                                              apolipoprotein B-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus.
                                                                                         Local 104;
                                                                                                                                                                                                                                                                                                                                                                                                             (KOAD ) KOREAN SCI & TECHNOLOGY RES CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Region
  61
                         61
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                                                                           \vdash
                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                         AAT85091.
                                                                     DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
RFSGSGSGDYSLTISSLBYEDLGIYYCLQFDEFPYTFGGGTKLBIK 107
                      RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDBFPYTFGGGTKLEIK 107
                                                 DIKMTQSPSSMYASLGERVTITCKASQDIYSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                       95KR-00039459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96JP-00114492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50. .56
/label= CDR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= Ckappa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /label= CDR3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= CDR1
50. .56
                                                                                                              97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               214
                                                                                                              Score 548; DB 2;
Pred. No. 4.3e-36;
                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                  1;
                                                                                                                          Length 214;
                                                                                                   Indels
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                                                                                                  Gaps
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RESULT 13

RESULT 14 AAB86037

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                                                                                                                                                                                                                                                     ARR95946-R95948 represent sequences for variable regions of an antibody produced by the hybridoma cell line HNK-20. This sequence represents the sequence for the antibody HNK-20 variable kappa chain. HNK-20 is a murine hybridoma cell line, that produces IgA specific for the F glycoprotein of respiratory syncytial virus (RSV). The DNA encoding these sequences were isolated using primers specific for the 5 untranslated region of the variable region, and for the intron downstream of the rearranged J region (see AAT30459-T30545 for primer sequences). The DNA encoding these sequences can be inserted into vectors containing heterologous (such as sequences can be inserted into vectors containing heterologous (such as suitched antibodies. The antibodies are useful in the treatment and diagnosis of infection by RSV, such as pneumonia and bronchiolitis, in thumans and animals. By using genomic DNA as a template, variable region genes can be isolated without producing fragments that have to be adapted for recombinant antibody expression. Also, by using the genomic DNA, no for recombinant region of the bNA sequence encoding the target variable region is required. Chimeric antibodies produced from these proteins, that contain the constant region of the host being treated, are less likely to cause
                                                                                                                                         Matches
                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                         Sequence 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 9; Page 30; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding variable region of antibody HNK-20 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-286826/29.
N-PSDB; AAT30456.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Berdoz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9616974-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chimeric antibody; isotype-switch
pneumonia; bronchiolitis; animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antibody; HNK-20; variable kappa chain; hybridoma; murine; IgA; mouse; F glycoprotein; respiratory syncytial virus; RSV; constant region gene; chimeric antibody; isotype-switched antibody; therapy; infection; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HNK-20 variable kappa chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR95946;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR95946 standard; protein; 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      respiratory syncytial virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ORAV-) ORAVAX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-JUN-1996.
                                                                                                                                       102;
                               61
                                                                   21
81
                                                                                                    _
                                                                                                                                                                                                                                             immune reactions
                                                                                                                                                       Similarity
                  RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                    DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
RFSGSGGQDYSLTISSLEYEDMGIYYCLQFDEFFYTFGGGTKLEIK 127
                                                                   DIKVTQSPSSMYASLGERVTITCKASQDINNYLNWFQQKPGKSPKTLIYRANRLLDGVPS
                                                                                                                                       Conservative
                                                                                                                                                                                                           AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
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                                                                                                                                                    97.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ç
                                                                                                                                   Score 546; DB 2;
Pred. No. 3.7e-36;
5; Mismatches 0
                                                                                                                                       0
                                                                                                                                                                    Length 127
                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for treating
                                                                                                                                     0,
                                                                                                                                     Gape
                                                                                                      60
                                                                   80
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AAB86037 standard; protein; 246

B

Matches

104; Conservative

1;

Mismatches

2

Indels

0

Gaps

60

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137 DIQMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQXPGKSPKTLIYRANRLVDGVPS 196

1 DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS

61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107

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This invention describes a novel polypeptide (I), comprising an CC oligopeptide (OP1) having the variable region of the heavy chain (VH) of CC and anti-CA19-9 antibody (Ab), or its fragment with the same binding CC specificity for CA19-9 antigen, and an oligopeptide (OP2) based on the CC variable light chain (VL) region of an Ab, or its fragment, is new OP1 (CC and OP2 are linked, directly or through a linker peptide (LP). The CC and OP2 are linked, directly or through a linker peptide (LP). The CC and OP2 are linked, directly or through a linker peptide (LP). The CC pharmaceutical or diagnostic agent for detection, localization and/or CC pharmaceutical or diagnostic agent for detection, localization and/or CC pharmaceutical or diagnostic agent for detection, localization and/or CC used to produce bi- or multi-specific antibodies, also useful for CC used to produce bi- or multi-specific antibodies, also useful for CC used to produce bi- or multi-specific antibodies, also useful for CC used to produce bi- or multi-specific antibodies, also useful for CC used to produce bi- or multi-specific antibodies, also useful for CC used to produce tis rematured to active form very efficiently after CC internalized by the cells, and has a long residence time on the cell culted for drug targeting, or prodrug activation. Since (I) do not include murine constant regions, it should be possible to administer them CCC when coupled to the human CH2CH3 immunoglobulin domains, they cause appecific lysis of tumor cells. This sequence represents the mouse derived anti-CAl9-9 antibody construct described in the method of the invention vx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New single-chain Fv fragment specific for antigen CA19-9, useful for diagnosis and treatment of tumors, particularly of stomach and pancreas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 6; Fig 1; 23pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAF88024.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-345810/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-APR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antigen; CA19-9; murine; variable heavy chain; VH; anti-CA19-9; canc variable light chain; VL; cytostatic; detection; stomach tumor cell; pancreas tumor cell; immunotherapy; single-chain Fv; drug targeting;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ABKE/) ABKEN
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1 DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS

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                                                                                                         A method has been developed of depleting CD5+ cells in an animal. The method comprises administering a cytotoxic protein containing a modified immunoglobulin (Ig) variable domain, where the protein is an anti-CD5 Ig molecule or an immunoconjugate or fusion protein containing an anti-CD5 Ig molecule, and where the modified Ig variable domain comprises at least one of (a) a modified light chain variable region (see AAW58478 or AAW58480), and (b) a modified heavy chain variable region (see AAW58479 or AAW58481), where AAW58478 and AAW58479 are humanised forms of the H65 light and heavy chain variable domains with low risk amino acid substitutions [i.e. low risk of reducing antigen-binding specificity.] and AAW58480 and AAW58481 are humanised forms of the H65 light and heavy chain variable domains with moderate risk amino acid substitutions and are present in humanised H65 antibody has (ACC HB 11206). The method is useful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains the method is seeful for treating anticomes of concatally contains and contains which contains and contains which contains anticomes of contains and contains where the contains and contains which 
                                                               useful for treating autoimmune diseases, especially systemic lupus erythematosus, rheumatoid arthritis, psoriasis or type I diabetes. The
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| NARY;<br>rel. 1:<br>rel. 1:<br>rel. 2:<br>f Mab7<br>Chord  | PS00290; IG MHC; U<br>236 AA; 76454 M<br>98.4%;<br>99.1%;<br>6; Conservative<br>DIKWTQSPSSMYASIGER<br>   | PubMed=83 m J.F., Gr acterizati ion of ant ion of ant ion of ant ion of ant jene  | IINARY;  ILrel. 25, 1  ILrel. 25, 1  ILrel. 26, 1  Ircinoma li  ree).  Chordata  Chordata  Rodentia   | 108 1 108 2 107 1 108 1 107 1 107 1 108 1 |
| PRT; 21<br>Created)<br>Last sequer<br>Last annota<br>Fragment).  | MW; 2C586EBF5EA10F4C  ; Score 554; DB 2; ; Pred. No. 1.9e-49; 0; Mismatches 1  RVTITCKASQDINSYLSWFQQ                    RVTITCKASQDINSYLSWFQQ                           RVTITCKASQDINSYLSWFQQ  | 72513; reene A.R., Lee ; con of 1116NS19: ibody fragments  | PRI<br>Creat<br>Last<br>Last<br>Jat c   | Q9UL77 KV1H HUMAN KV5K MOUSE AAR10992 KV1D HUMAN Q72473 KV5L MOUSE Q8K1F3 KV1C HUMAN KV5M MOUSE Q9UT79 KV5P MOUSE Q8R062   |
| AA.<br>e update)<br>ion update)<br>Vertebrata;   | PS00290; IG MHG; UNKNOWN 1.  236 AA; 76454 MW; 2C586EBPSEA10F4C CRC64;  98.4%; Score 554; DB 2; Length 236;  imilarity 99.1%; Pred. No. 1.9e-49;  imilarity 99. | Edg<br>wy Sch  | date)<br>update)<br>ebrata;<br>Muridae;   | •   |
| <b>Buteleostomi</b> ;  | 0;<br>0;<br>IYRANRIN<br>       <br> 107  | ge M.D.;<br>and light chain<br>erichia coli.";   | Euteleostomi;<br>Murinae; Mus   | Q9ul77 homo P01600 homo P01644 mus r P01644 mus r Aar10992 mus P01596 homo Q7z473 homo Q7z473 homo Q7k1f3 mus r P01595 homo Q9ul79 homo Q9ul79 homo P01649 mus r P01639 mus r P01639 mus r  |
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PDB; 1208; X-23; AV-21-214.

PDB; 1808; X-ray; L-1-210.

GO; GO:0005634; C:nucleus; IEA.

GO; GO:0003700; F:transcription factor

GO; GO:0003700; F:transcription of transc

GO; GO:0003700; F:transcription of transc

InterPro; IPR001356; Homeobox.

InterPro; IPR001356; Ig-U1.

InterPro; IPR003597; Ig-C1.

InterPro; IPR003597; Ig-C1.

InterPro; IPR00306; Ig-WHC.

InterPro; IPR003596; Ig-WHC.

InterPro; IPR003596; Ig-WHC.

INTERPRO; IFR003596; Ig-WHC.

PRAINTS; PR00047; ig; 1.

PRINTS; PR00047; IG; I.

PROSITE; PS50835; IG-LIKE; 2.

PROSITE; PS50835; IG-MHC; UNKNOWN-1.

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                                                       use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an or send an email to license agreement (See http://www.isb-
                 EMBL; V00772; CAA24
PIR; A01920; KVMST1
                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                 genes of a mouse myeloma.";
Nature 287:603-607(1980).
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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21-JUL-1986 (Rel. 01, Last sequence update)
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EMBL; AF15227
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; ICC; X-ray; A/C=1-214.
; IEO8; X-ray; A-C=1-210.
; IKG; X-ray; L=1-210.
; IKG; X-ray; L=1-210.
; ICO:0005634; C:nucleus; IEA.
; ICO:0006555; P:regulation of transcription,
; ICC:0006555; P:regulation of transcription,
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15 kappa chain V
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Nature 291:668-670(1981).
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HSSP; P01607; 1BWW.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ig-like.
Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                               Signal
                                                                                                                                                                                                                                                                                                                                                                                              ည
                                                                                                                                                                                                                                                                                                                                                                                              localized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence up
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
                                                       Framework-3.
Complementarity-determining-3
By similarity.
                                                                                                             Complementarity-determining-2
                                                                                                                                    Complementarity-determining-1. Framework-2.
                                                                                                                                                                           Ig kappa chain V-V region Framework-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                         BA852C58F328E1C3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 534;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Complementarity-determining-3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Complementarity-determining-1.
Framework-2.
Complementarity-determining-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               By similarity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Framework-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig kappa cha
Framework-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AFA5563D31BB7E05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           rearranged
ed mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chain V-V region T1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
.2e-47;
                                                                                                                                                                                                                                                                                                                                                                                           immunoglobulin V
mechanism.";
                          CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Euteleostomi; 

; Murinae; Mus
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Q7TMK3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTISSUE-Manmary tumor metastatized to lung. Tumor arose spontaneously;

X MEDILINE-22388257; PubMed=12477932;

X KITALBERGE R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

X Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Altechul S.F., Jordan H., Moore T., Wax S.I., Wang J., Hsieh F.,

X Altechul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Altechul S.F., Jordan H., Moore T., Casavant T.L., Scheetz T.E.,

X Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

X Altechul S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Altechul S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Altechul S.S., Mogwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

X Altechul S., Warley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Altechul S., Warley S.M., Sodergren B.J., Lu X., Gibbs R.A.,

X Altechul S., Warley S., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

X Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

X Mahlkesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

X Altechul S., Schmetz J., Myers R.M., Butterfield Y.S.,

X Altechul S., Stalska U., Smallus D.E., Schnerch A., Schein J.E.,

X Altechul S., Schnerch A., Schein J.E.,
                                               Query Match
Best Local Similarity
Matches 91; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity Matches 95; Conservation
                                                                                                                                                                                                                          EMBL; BC055906; AAH55906.1; -.
InterPro; IPR007110; Ig-like.
InterPro; IPR0031597; Ig-Cl.
InterPro; IPR003596; Ig-MHC.
InterPro; IPR003906; Ig-MHC.
InterPro; IPR00396; Ig-V.
Pfam; PF007654; Cl-set; I.
Pfam; PF00047; 1g; 1.
SMART; SM00406; IGV; 1.
                                                                                                                                       Hypothetical protein. SEQUENCE 236 AA; 2
                                                                                                                                                                               PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN=CZECH II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jones S.J., Marra M.A.; "Generation and initial analysis of more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hypothetical protein. Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7TMK3
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-Mammary tumor metastatized to lung. Tumor arose spontaneously,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mouse cDNA sequences.
c. Natl. Acad. Sci. U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
    DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFP
                                                                                                                                                                                                                                                                                                                                                                                                                   (AUG-2003) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TrEMBLrel. 25, (TrEMBLrel. 25, (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                         26299 MW;
                                                                  83.1%;
85.0%;
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Last sequence Last anno
                                          Score 468; DB
Pred. No. 1.8e-
3; Mismatches
                                               3
                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99:16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                       ODB03488AAA6396F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence update)
annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             236
                                                                    DB 2;
.8e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   than 15,000
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                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                                                       Length 236;
                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Butterfield Y.S., A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   full-length human
                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
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    PAGE SOON SERVICE AND SERVICE 
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P80362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMAN
                                                                                  TURN
                                                                                                                                                                                                                                                                                       InterPro; IPR007110; Ig-like InterPro; IPR003596; Ig_v. Pfam; PF00047; ig; 1. SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Comparison of crystal structures of two homologous structural origin of altered domain interactions in light-chain dimers.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1995
01-OCT-2004
                                                                                                                                                                                                                                                Immunoglobulin
                                                                                                                                                                                                                                                                 3D-structure;
                                                                                                                                                                                                                                                                              PROSITE; PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                                                                           "Characterization and preliminar related fragment of the human kI J. Mol. Biol. 147:185-193(1981).

-I- MISCELLANEOUS: This is a Ben
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=95086080; PubMed=7993911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Stevens
                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=81267384; PubMed=6167731;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biochemistry 33:14848-14857(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Huang D.-B., Chang C.-H., Ainsworth C.
Solomon A., Stevens F.J., Schiffer M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ig kappa chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 1-35.
                                                                                                                                                                                                                                                                                                                                 ;; lWTL; X-ray; A/B=1-108.
GO:0005576; C:extracellular; NAS.
GO:0003823; F:antigen binding; NJ
GO:0006955; P:immune response; NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
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                                                                                                                                                                                                                                                                                                                                                                                                                                 F.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RFSGSGSGQDYSLTISSLESDDTATYYCLQHGESPYTFGSGTKLEIK 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AND X-RAY CRYSTALLOGRAPHY
                                                                                                                                                                                                                                                                                                                                                                                                                        Solomon A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Rel.
(Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                Westholm F.A., Panagiotopoulos N.,
                                                                                                                                                                                                                                                                    Bence-Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  V-I region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                         region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32, Last sequence update)
45, Last annotation updat
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                            preliminary crystallographic data on the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                                                                                                                                                             Bence-Jones
                                                                                                                                                                                           Complementarity-determining-3
                                                                                                                                                                                                             Framework-2.
Complementarity-determining-2
                                                                                                                                                                                 Framework-4.
                                                                                                                                                                                                      Framework-3
                                                                                                                                                                                                                                    Complementarity-determining-1
                                                                                                                                                                                                                                                Framework-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                            similarity.
-> SD (in Ref.
                                                                                                                                                                                                                                                                                                                                                                                                   Bence
                                                                                                                                                                                                                                                                   Direct protein sequencing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              update)
                                                                                                                                                                                                                                                                                                                                                                                                   Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bruenger A.T.,
                                                                                                                                                                                                                                                                                                                                                                            protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANGSTROMS)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                                                                                                                                                  Schiffer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proteins:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                    Wat."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eulitz
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자 RESULT ID XVIO-HIT ID TO TO THE RESULT ID TO THE RESULT IN THE 
                                                                                                                                                                               """ MISCELLANEOUL.

PIR; A91663; KIHURE.

R PDB; IAR2; X-ray; @=1-107.

JR PDB; IBWW; X-ray; A/B=1-107.

DR GO; GO:0005576; C:extracellular; NAS.
GO; GO:0006955; P:immune response; NAS.
GO; GO:0006955; P:immune response; NAS.

"""Pro; IPR007110; Ig-like.
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                                                                                                                                                                         GO; GO:0005576; C:extra
GO; GO:0003823; F:antig
GO; GO:0006955; F:immun
InterPro; IPRO07110; Ig
InterPro; IPRO03596; Ig
Ffam; PF00047; ig; 1
SMART; SM00466; IGV; 1.
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                                                                                                                          PROSITE; PS50835; IG LIKE 3D-structure; Bence-Jones Immunoglobulin V region.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Epp O., Lattman E.E., Schiffer M., Huber R., Palm W.; "The molecular structure of a dimer composed of the variable of the Bence-Jones protein REI refined at 2.0-A resolution."; Biochemistry 14:4943-4952(1975).
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P01607;
21-JUL-1986
21-JUL-1986
01-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "The primary structure of a crystalline monoclonal immunoglobulin kappa-type L-chain, subgroup I (Bence-Jones protein Rei); isolation and characterization of the tryptic peptides; the complete amino aci sequence of the protein; a contribution to the elucidation of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=76039968;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
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Hoppe-Seyler's Z.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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Mammalia; Eutheria; Primates;
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(Rel. 45, Last ann
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68.2%;
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annotation update)
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Complementarity-determining-3
                                    Complementarity-determining-2.
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Pred. No. 1.4e
18; Mismatches
                          Framework-3
                                                                  Framework-2
                                                                                                                                                                                                                                                                                                                                                                                    Bence-Jones protein.
                                                                            Complementarity-determining-1.
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Catarrhini; Hominidae;
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                                                                                                                                    sequencing;
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RC TISSUE-Skeletal Muscle;

RX MEDLINE-Skeletal Muscle;

RX MEDLINE-22388257; PubMed=12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

RA Hopkins S.F., Jordan H., Moore T., Max S.I., Wang J., Hong C.,

RA Hopkins S.F., Jordan K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., WcKernan K.J., Malek J.A., Gunzartne P.H.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunzartne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Willalon D.K., Muzny D.M., Sodergren E.G., Lu X., Gibbs R.A.,

RA Willalon D.K., Muzny D.M., Sodergren E.G., Lu X., Gibbs R.A.,

RA Willialon D.K., Muzny D.M., Sodergren E.G., Lu X., Gibbs R.A.,

RA Willialon D.K., Muzny D.M., Sodergren E.G., D., Dickson M.C.,

RA Rabesley R.W., Touchman J.W., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schmerch A., Schein J.E.,

"Geners E.D., Marra M.A.;

"Geners E.D., Marra M.A.,

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"Geners E.D., D. Schmerch A., Schein J.E.,

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Matches 74
 "Generation and initial analysis of and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16
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Q7Z3Y4;
01-OCT-2003
01-OCT-2003
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                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                   Hypothetical protein.
Homo sapiens (Human).
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69.8%;
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Pred. No. 3.7e
l3; Mismatches
99:16899-16903 (2002)
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.7e-33;
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                           full-length human
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RESULT 9
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Matches
molecular replacement methods using region of the kappa chain REI.

-!- MISCELLANEOUS: The C region of this -!- MISCELLANEOUS: The C region of this -!- MISCELLANEOUS: This is a Bence-Jone PIR; A91653; KLHUAU.

-!- MISCELLANEOUS: This is a Bence-Jone PIR; A91653; K-ray; A=1-107.

GO; GO:0005576; C:extracellular; NAS.
GO; GO:0005576; C:extracellular; NAS.
GO; GO:0003823; P:antigen binding; NAS.
GO; GO:0003823; P:antigen binding; NAS.
GO; GO:0006955; P:immune response; NAS.
InterPro; IPR0031596; Ig_v.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
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EMBL; BC005332; AAH05332.1; -.
InterPro; IPR0077110; Ig-1ike.
InterPro; IPR003597; Ig_c1.
InterPro; IPR003597; Ig_wHC.
InterPro; IPR00306; Ig_wHC.
InterPro; IPR0030506; Ig_w-
pfam; PF07654; C1-set; 1.
pfam; PF07654; C1-set; 1.
SMART; SM00406; IGw 1.
SMART; SM00406; IGv; 1.
SMORTE; PS50835; IG_LIKE; 2.
PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS50835; IG_LIKE; 2.
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21-JUL-1986
21-JUL-1986
01-OCT-2004
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Fehlhammer H., Schiffer M., Epp O., Colman P.
Schwager P., Steigemann W., Schramm H.J.;
"The arructure determination of the variable
                                                                                                                                                                                                                                                                           MEDLINE=72189444; PubMed=5028201; Schiechl H., Hilschmann N.; "Rule of antibody structure. The primary immunoglobulin L-chain of the kappa-type, protein Au).";
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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SEQUENCE FROM N.A.
TISSUE=Skeletal Muscle;
Strausberg R.;
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SEQUENCE 2:
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Catarrhini; Hominidae;
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STRAND
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                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
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InterPro; IPR003596;
Pfam; PF00047; ig; 1
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(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 25, Last annotation updat)
Live immunoglobulin light chain variab
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n der Merwe P.L.,
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Complementarity-determining-3
Framework-4.
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                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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Ig kappa chain
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SMART; SM00406; IGv; 1.
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P01608;
21-JUL-1986
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Hilschmann N., Barnikol H.U., Hess M.,
Steinmetz-Kayne M., Suter L., Watanabe
(In) Franck F., Shugar D. (eds.);
                                                                                                                  DOMAIN
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InterPro; IPR003596; Ig_v.
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Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=68362076; PubMed=5595110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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   Local Similarity
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GO:0003823; F:antigen binding;
GO:0006955; P:immune response;
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                                                            108 AA;
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97
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                                                          11782 MW;
 69.4%;
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                                                                                                                                                                                                                                                                                                                                                                     n binding; NAS response; NAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    kappa-type
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annotation updat
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                                                                                                                                                                                                                                                        protein sequencing;
Score 391; DB 1;
Pred. No. 7.5e-33;
                                                                                                          Framework-3.
Complementarity-determining-3
Framework-4.
                                                                                                                                                           Complementarity-determining-2.
                                                                                                                                                                                    Complementarity-determining-1. Framework-2.
                                                                                                                                                                                                                       Framework-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bence-Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 392;
Pred. No. 5
                                                    F5ACEDE5A313DF3A CRC64;
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                                                                                           similarity.
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.9e-33;
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               Length 108;
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RC TISSUE-Primary B-Cells;

RX MEDLINE=22388257; PubMed12477932;

RX MEDLINE=22388257; PubMed12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klauener R.D., Collins F.S., Wagner L., Shannen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stepleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stepleton M.J., Usdain T.B., Toshiyuki S., Carninci P., Prange C.,

RA Stepleton M.J., Usdain T.B., Toshiyuki S., Carninci P., Prange C.,

RA RA S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RA Fahey J., Helton E., Ketteman M., Rodrigues S., Sanchez A.,

RA Hothing M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

RA Arnae S.T. Marra M. M.
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Q6GMX8
        Query Match
Best Local S
Matches 73
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                                                                                                                                     Pfam; PF07654; C1-set; T.
Pfam; PF00047; ig; 2.
SMART; SM00409; IG; 2.
SMART; SM004007; IGc1; 1.
SMART; SM00406; IGv; 1.
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                                                                         PROSITE; PS50835; IG_LIKE; 2.
PROSITE; PS00290; IG_MHC; UNKNOWN_1.
Hypothetical protein.
SEQUENCE 236 AA; 25707 MW; 4FC8E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUL-2004
05-JUL-2004
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                        Jones S.J., Marra M.A.;
Jones S.J., Warra M.A.;
Jones S.J., Warra M.A.;
Jones S.J., Warra M.A.;
"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
and mouse cDNA sequences.";
proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                      InterPro; IPR003599; Ig.
InterPro; IPR0077110; Ig-1ike.
InterPro; IPR003597; Ig_c1.
InterPro; IPR003006; Ig_MHC.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                            Submitted (JUN-2004) to the EMBL; BC073764; AAH73764.1;
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                 ISSUE=Primary B-Cells;
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                          Similarity
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       Conservative
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                                                                     25707 MW; 4FC8E14B6559EFC9 CRC64;
                     69.1%;
68.2%;
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Primates;
     17;
Score 389; DB 2;
Pred. No. 3e-32;
17; Mismatches 1
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Last annotation update)
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KV1V_HUMAN
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Best Local S
Matches 70
                                           05-JUL-2004 (TrEMBLrel. 2
05-JUL-2004 (TrEMBLrel. 2
05-JUL-2004 (TrEMBLrel. 2
Hypothetical protein.
Homo sapiens (Human).
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InterPro; IPR003596; Ig_v.
Pfam; PP00047; Ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
Amyloid; Direct protein sequenc DOMAIN 1 23 Pr
                                                                                                                      Q6GMX9;
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NON_TER
SEQUENCE
                  Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dwulet F.E.; O'Connor T.P., Benson M.D.;
"Polymorphism in a kappa I primary (AL) amyloid protein (BAN).";
Mol. Immunol. 23:73-78(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
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Mammalia; Eutheria; Primates;
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13-AUG-1987 (Rel.
05-JUL-2004 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIR; A01878; K1HUBN.
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                                                                                                                                                                 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     kappa chain
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GO:0003823; F:antigen binding; NAS.
GO:0006955; P:1mmune response; NAS.
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108
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-I region BAN.
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                  Chordata;
Primates;
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27,
27,
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Pred. No. 1.5e-
20; Mismatches
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Complementarity-determining-2.
Framework-3.
Complementarity-determining-3.
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                Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                                        sequence update)
annotation update)
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausmer R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heileh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heileh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heileh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heileh F.,
RA Hopkins R.F., Jordan H., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Raha S.S., Morrley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Raha S.S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Raha S.S., Wang A.C., Shevchan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchanko Y., Bouffard G.G.,
Raha Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Raha K.T., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Raha K.T., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR007110; Ig-like.
InterPro; IPR003597; Ig-cl.
InterPro; IPR003596; Ig-MCC.
InterPro; IPR003596; Ig-W.
Pfam; PF07654; Cl-set; I.
Pfam; PF007654; Cl-set; I.
SMART; SM00409; IG; 2.
SMART; SM00407; IGC1; 1.
SMART; SM00406; IGV; 1.
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TISSUB-Primary B-Cells;
Strausberg R.;
Strausberg R.;
Submitted (JUN-2004) to the EMBL; BC073763; AAH73763.1; -.

InterPro; IRR003599; Ig.
                                                                                                                                                                                                                                R HUMAN

-KV1R HUMAN

P01610;

21-JUL-1986

21-JUL-1986

05-JUL-2004
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SEQUENCE FROM N
TISSUE=Primary
                                                                                                                                                                      21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up
05-JUL-2004 (Rel. 44, Last annotation
1g kappa chain V-I region WEA.
Homo sapiens (Human)
                                                                            Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS50835; IG LIKE; PROSITE; PS00290; IG_MHC; Hypothetical protein.
SEQUENCE 236 AA; 25924 P
MEDLINE=83273707; PubMed=6410398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=22388257; PubMed=12477932;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RFSGSGSGTDFTLTISSLQPEDFATYYCQQYNTYPLTFGGGTKVEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DIOMTOSPSSLSASVGHRVTITCRASONVSRWLAWYOORPEKAPKSLIYATSSLHSGVPS
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1. Acad. Sci. U.S.
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                                                                                                                                                                                                                                                                                                                                                           STANDARD;
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Pred. No. 9.9e-32;
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                                                                                                                 Catarrhini; Hominidae;
                                                                                                                                             Craniata; Vertebrata; Euteleostomi;
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A., Schein J.E.,
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Search completed: December 29, 2004, 18:05:18 Job time: 75.8584 secs
                                                                                                                                                                                                                                                                                                                                                                                                             RA Goni F., Frangione B.;

RT "Amino acid sequence of the Fv region of a human monoclonal IgM
RT (protein MEA) with antibody activity against 3,4-pyruvylated galactose
RT in Klebsiella polysaccharides K30 and K33.";

CC -!-MISCELLANEOUS: This chain was obtained from a monoclonal antibody
CC against 3,4-pyruvylated galactose and isolated from a patient with
CC waldenstrom's macroglobulinemia.

PR PIR; A01876; KIHUWE.
DR G0; G0:0005576; C:extracellular; NAS.
CG; G0:000555; P:immune response; NAS.
DR G0; G0:000555; P:immune response; NAS.
DR InterPro; IPR007110; Ig-like.
DR G0; G0:0006555; P:immune response; NAS.
DR InterPro; IPR00359; Ig_v.
DR Ffam; PP00047; ig; 1.
DR FAM; SMO406; IGv; 1.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS500359; Ig_v.
DR Ffam; PP00047; ig; 1.
DR MONOClonal antibody.
Framework-1.
PT DOMAIN 24 34 Complementarity-determining-1.
DOMAIN 57 88 Framework-2.
PT DOMAIN 57 88 Framework-2.
PT DOMAIN 57 88 Framework-3.
PT DOMAIN 57 88 Framework-1.
                                                                                                                                                                                                                                     Query Match 68.0%; Score 383; DB 1; Length 108; Best Local Similarity 66.4%; Pred. No. 5.1e-32; Matches 71; Conservative 17; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                            DISULFID
NON TER
SEQUENCE
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DOMAIN
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By similarity.
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
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     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match
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563
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
   DIKMTQSPSSMYASLGERVT......CLQYDEFPYTFGGGTKLEIK 107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
     GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd
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   Description
g kappa chain V r
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g kappa chain V r
g kappa chain V -1
g kappa chain V r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1

$52447

19 kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 08-May-1995 #sequence_revision 21
C;Accession: $52447
R;Berdoz, J.; Kraehenbuhl, J.P.
submitted to the EMBL Data Library, Novem
A;Description: Specific amplification by
A;Reference number: $52445
A;Accession: $52447
A;Creension: $52447
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| 386 68.6 107<br>386 68.6 125<br>386 68.6 125<br>385 68.4 108<br>385 68.2 117<br>384 68.2 117<br>384 68.2 113<br>385 68.1 104<br>383 68.0 108<br>383 68.0 108<br>383 68.0 125<br>382 67.9 107<br>382 67.9 108<br>383 67.9 108   | 2      |
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|  | 200    |
| 107<br>108<br>108<br>108<br>108<br>108<br>1127<br>1127<br>1127<br>1129<br>1104<br>1106<br>1107<br>1107<br>108  | 0      |
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| B49026<br>\$19112<br>\$40349<br>\$19970<br>\$11224<br>\$46331<br>\$403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317<br>\$2403317 | 200365 |
| Ig kappa chain V r Ig kappa chain - h Ig kappa chain V r   | kanna  |

# ALIGNMENTS

November 1994 on by the polymerase

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reaction

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21-Jul-1995

#text\_change

21-Jan-2000

| A;Introns: $17/1$ C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka | A;Residues: 1-128 "ALIT"  A;Residues: 1-128 ALIT"  A;Cross-references: UNIPROT:P01637; GB:V00772; NID:g51636; PIDN:CAA24150.1; PID:g762979  A;Note: the sequence was determined from the differentiated gene C;Genetics: | R;Altenburger, W.; Steinmetz, M.; Zachau, H.G. Nature 287, 603-607, 1980 A;Title: Functional and non-functional joining in immunoglobulin light chain genes of a A;Reference number: A01920; MUID:81052342; PMID:6776411 A;Accession: A01920 A;Accession: A01920 | RESULT 2  KVMST1  Ig kappa chain precursor V region (T1) - mouse  C;Species: Mus musculus (house mouse)  C;Date: 31-pec-1980 #sequence_revision 08-Oct-1981 #text_change 09-Jul-2004  C;Accession: A01920 | Qy 61 RFSGSGSQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107<br> | QY 1 DIKWTQSPSSMYASLGERVTITCKASQDINSYLSWPQQKPGKSPKTLIYRANRLVDGVPS 60    - | Query Match 97.0%; Score 546; DB 2; Length 127;<br>Best Local Similarity 95.3%; Pred. No. 1.7e-39;<br>Matches 102; Conservative 5; Mismatches 0; Indels 0; Gaps 0; | A;Introns: 17/1 C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;36-110/Domain: immunoglobulin homology <imm></imm> | A;ACCEBSION: 302447 A;Status; preliminary A;Molecule type: DNA A;Molecule type: DNA A;Cross-references: EMBL:X82688; NID:g673443; PIDN:CAA58009.1; PID:g673444 C:Genetics: |
|---|--|--|---|--|---|--|---|--|

into

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A;Introns: 17/1
C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin F;1-20/Domain: signal sequence #status predicted <SIG>F;21-114/Domain: V segment #status predicted <VRE>
                                                                                                                   A;Molecule type: DNA
A;Residues: 1-128 <NEA>
A;Experimental source: s
A;Note: the Vk40-140 ger
                                                                                                                                                                                       Mol. Immunol. 26, 371-382, 1989
A/Title: Characterization of the heavy and A/Reference number: PL0100; MUID:89238344;
A/ACCESSION: PL0101
                                                                                                                                                                                                                                                                                           Ig kappa chain precursor V region (40-140) - mouse C;Species: Mus musculus (house mouse) C;Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 C;Accession: PL0101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ig kappa chain precursor (15C5) - mouse (;Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Date: 25-Feb-1994 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000 C;Accession: $14237 R;Vandamme, A.M.; Bulens, F.; Bernar, H.; Nelles, L.; Lijnen, R.H.; Collen, D. Bur. J. Biochem. 192, 767-775, 1990 A;Title: Construction and characterization of a recombinant murine monoclonal antibody A;Reference number: $14236; MUID:91006173; PMID:2209622
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C;Keywords: heterotetramer; immunoglobulin
F;36-110/Domain: immunoglobulin homology <IMM>
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Introns: 17/1
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F:/20/Domain: signal sequence #status predif:/21-128/Product: Ig kappa chain V region (7 F:)6-110/Domain: immunoglobulin homology <Ibr/>F:)6-110/Domain: immunoglobulin predicted
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Pred. No. 1.8e-37;
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Pred. No. 1
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                                                       immunoglobulin homology
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PMID:2497340
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L.7e-38;
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F;1-20/Domain: signal sequence #status predicted F;21-115/Product: Ig kappa chain V region (L6) #s F;36-110/Domain: immunoglobulin homology <IMM>
                                                                                                                                                C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light () hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer
                                                                                                                                 A; Introns: 17/1
C; Complex: An i
                                                                                                                                                                                                                                                                                   R;Pech, M.; Hochtl, J.; Schnell, H.; Zachau, Nature 291, 668-670, 1981
A;Title: Differences between germ-line and re
                                                                                                                                                                                                                                                                  A;Title: Differences between germ-line and rearranged immunoglobulin A;Reference number: A93259; MUID:81220975; PMID:6264318
                                                                                                                                                                                                                                                                                                                                                  Ig kappa chain precursor V region (L6) - mouse C;Species: Mus musculus (house mouse) C;Date: 18-Aug-1982 #sequence_revision 18-Aug-1982 C;Accession: A01921
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;43-108/Disulfide
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A;Molecule type: DNA
A;Residues: 1-106 <LOS>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ig kappa chain V region - mouse
C:Species: Mus musculus (house mouse)
C:Date: 20-Feb-1995 #sequence_revision
C:Accession: S20652
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Pred. No. 3.4e-36;
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3; Mismatches
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Pred. No. 3.2e-37
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A;Cross-references: EMBL:X53355; NID:g55308; PIDN:CAA37441.1; PID:g930226 A;Experimental source: hybridoma NC19-F5 C;Superfamily: immunoglobulin v region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin C;Keywords: heterotetramer; immunoglobulin F;16-90/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                            A;Cross-references: EMBL:X53353;
A;Experimental source: hybridoma
A;Accession: $13702
                                                                                                                                                                                                                                                       A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-104 <PEN>
                                                                                                                                                                                                                                                                                                            Ig kappa chain V region (hybridoma NC19-E10) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
C;Accession: S13700; S13702
R;Pennell, C.A.; Mercolino, T.J.; Grdina, T.A.; Arnold, L.W.; Haughton, G.; Clarke, Bur. J. Immunol. 19, 1289-1295, 1989
A;Title: Blased immunoglobulin variable region gene expression by Ly-1 B cells due t A;Reference number: S13685; MUID:89338557; PMID:2503389
A;Accession: S13700
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S13700
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C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
C;Accession: PH1065
R;Tillman, D.M.; Jou, N.T.; Hill, R.J.; Marion, T.N.
J. Exp. Med. 176, 761-779, 1992
A;Title: Both IgM and IgG anti-DNA antibodies are the products A;Reference number: PH0971; MUID:92381444; PMID:1512540
A;Accession: PH1065
A;Status: nucleic acid sequence not shown
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A; Residues: 1-99 < PE2>
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A; Residues: 1-98 <TIL>
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Best Local
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Best Local &
  Query Match
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Similarity 94.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 88.6%; Score 499; DB 1;
Similarity 100.0%; Pred. No. 1.4e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTF 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDBFP 115
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    81.7%;
                                                                                                                                                                                                                   NID:g55304; PIDN:CAA37439.1; NC19-E10
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Pred. No. 1.3e-34;
1; Mismatches 4
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  Score 460;
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    DB
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Length 104;
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C; Keyworas: .....
F;38-112/Domain:
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A; Molecule type: mRNA
A; Residues: 1-103 < PENA
A; Residues: 1-103 < PENA
A; Residues: 1-103 < PENA
A; Residues: mBL: X53356; NID: 955310; PIDN: CAA37442.1; PID: 9930227
A; Cross-references: EMBL: X53356; NID: 955310; PIDN: CAA37442.1; PID: 9930227
C; Superfamily: immunoglobulin V region; immunoglobulin
C; Keywords: heterotetramer; immunoglobulin
F; 16-90/Domain: immunoglobulin homology < IMM>
                                                                                                                                                                                                                                                                                                                                                                          Gene 40, 107-114, 1985
A;Title: Structure and expression of kappa-chain genes in A;Reference number: A91541; MUID:86137406; PMID:3005117
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ig kappa chain precursor V region (IR2) - rat C;Species: Rattus norvegicus (Norway rat) C;Date: 17-Sep-1987 #sequence_revision 17-Sep C;Accession: B23986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eur. J. Immunol. 19, 1289-1295, 1989
A;Title: Biased immunoglobulin variable region
A;Reference number: $13685; MUID:89338557; PMID
A;Accession: $13703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ig kappa chain V region (hybridoma NC17-D8) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
C;Accession: S13703
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S13703
                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-129 < HEL>
                                                                                                                                                                                                                                                                                                                                                        A; Accession: B23986
                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Hellman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B23986
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                    Superfamily: immunoglobulin V region; immunoglobulin homology; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 85.0 Matches 89; Conservative
                                                                                                                                                                    Matches
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                   61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
83
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85; Conserv
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                                                                                                        DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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RFSGSKSGSDYSLTISSLESEDVADYHCLQYNBYPYTFGPGTKLELK 129
                                                                              DIOMTOSPSSMSVSLGDTVTIPCRASODVGIYVIWPOOKPGKSPRRLIYLATTLADGVPS
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                                                                                                                                                                                                                                                immunoglobulin homology
                                                                                                                                                                  Conservative
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83.3%;
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Pred. No. 1.3e-30;
3; Mismatches 14
                                                                                                                                                                Score 412; DB 2;
Pred. No. 3.7e-28;
1; Mismatches 18
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3; Mismatches 12;
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                                                                                                                                                                                                                                                <MM>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       jion gene expression by PMID:2503389
                                                                                                                                                                  18;
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                                                                                                                                                                                                     Length 129;
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C;Species: Mus muscurus (C;Date: 11-Jan-1991 #sequence_revision C;Accession: A34966 R;Caton, A.J.; Koprowski, H. Proc. Natl. Acad. Sci. U.S.A. 87, 6450-Proc. Natl. Acad. Sci.
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S13701
                                                                                                                                                                                                                                                                   A34966
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ig kappa chain V region - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 19-May-1995 #sequence_revision 21-Jul-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:X53354
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
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A;Molecule type: mRNA
A;Residues: 1-101 <PEN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Pennell, C.A.; Mercolino,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 09-May-1997 C;Accession: S13701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ig kappa chain V region
                                                                                                                                                                                   y heavy chain V region (PR8-9) - mouse);Species: Mus musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION: S52789

ROCCA, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, G.; Mougenot, B.; Ronco, Rocca, A.; Khamlichi, A.A.; Touchard, March 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reference number: S52789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                        RESGSGSGTDESETISSLOPEDLATYYCOQYDNLPLTEGGGTKVEIK 129
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71.0%;
.S.A. 87, 6450-6454, 199 hemagglutinin-specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 410; DB 2;
Pred. No. 5.4e-28;
                                                                                                                                                                                                                     mouse (fragment
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Pred. No. 4.3e-28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                         #text_change
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C;Superfamily: in C;Keywords: heter F;16-90/Domain:
C;Keywords: heterotetramer; immunoglobulin
F;37-111/Domain: immunoglobulin homology <</pre>
                                  A;Cross-references: EMBL:X72479; NID:g441426; PIDN:CAA51147.1; PID:g441427 C;Superfamily: immunoglobulin V region; immunoglobulin homology
                                                                          A;Status: preliminary; translation
A;Molecule type: mRNA
A;Residues: 1-129 <KLE>
                                                                                                                                 Eur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi
A;Reference number: S40312; MUID:94080891; I
A;Accession: S40369
                                                                                                                                                                                                      R; Klein, R.; Jaenichen, R.; Zachau, H.G.
                                                                                                                                                                                                                                             C;Species: Homo sapiens (man)
C;Date: 06-Mar-1994 #sequence_revision 26-May-1995 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Griffithe, A.D.; Malmqvist, M.; Marke, J.D.; Bye, J.M.; Embleton, M.J.; McCafferty, EMBO J. 12, 725-734, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-107 < GRI>
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C;Superfamily: immunoglobulin V region; immunoglobulin homology
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A;Accession: A34966
A;Status: preliminary
                                                                                                                                                                                                                                                                                         Ig kappa chain -
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A; Residues: 1-75 < CAT>
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Species: Homo sapiens (man)
Date: 03-Feb-1994 #sequence_revision 03-Feb-1994
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97.3%;
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homology <IMM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 397; DB 2;
Pred. No. 5.7e-27;
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2; Mismatches
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Pred. No. 2.7e-27;
                                                                                                               not shown
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PMID:8258341
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| t C  |   |   | Query Match<br>Best Local :<br>Matches 7:  |
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| )]et   | 61<br>82  | 1<br>22   | 7, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,  |
| 9 6<br>6.4   | X - R   |   | F 12   |
| 37 D   | 90<br>  | 3=3   | C II   |
| Search completed: Decem<br>Job time : 15.8437 secs                       | 386<br>—886<br>—886   | 48C<br>   | nse<br>rit   |
| Search completed: December 29, 2004, 18:06:56<br>Job time : 15.8437 secs | 700 H   | TISS<br> :<br> MSS  | rva.   |
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| 56   | 61 RPSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107 :       ::      :   82 KFSGSGSGTDFTLTISSLQPEDFATYYCQQYNSYPYTFGQGTKLEIK 128 | 1 DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS 60 | Query Match 70.5%; Score 397; DB 2; Length 129; Best Local Similarity 69.2%; Pred. No. 6.8e-27; Matches 74; Conservative 17; Mismatches 16; Indels |
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*

12: /cgn2_6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

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16: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

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18: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

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19: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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  7 US-10-774-076-3

7 US-10-774-076-13

5 US-10-436-782-3

5 US-10-436-783-1

4 US-10-436-189-26

5 US-10-325-696-26

4 US-10-127-890-123

4 US-10-127-890-123

4 US-09-158-120A-21

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US-09-844-736-4

4 US-10-16-396-4

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Sequence 3, Appli
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| <b>4</b><br>5     | 44     | 43      | 42      | 41       | 40              | 39         | 38              | 37               | 36              | 35    | 34                | 33                | 32                | 31               | 30                | 29   | 28   | 27   | 26   | 25                 |      | 23                | 22    | 21           |           | 19           | 18               | 17                |                  | 15           |                   |
|-------------------|--------|---------|---------|----------|-----------------|------------|-----------------|------------------|-----------------|-------|-------------------|-------------------|-------------------|------------------|-------------------|------|------|------|------|--------------------|------|-------------------|-------|--------------|-----------|--------------|------------------|-------------------|------------------|--------------|-------------------|
| 436               | 436    | 436     | 439     | 439      | 441             | 443        | 443             | 443              | 443             | 447   | 447               | 447               | 447               | 458              | 458               | 463  | 463  | 464  | 464  | 464                | 464  | 465               | 465   | 484          | 484       | 487          | 487              | 487               | 503              | 503          | 508               |
| 77.4              | 77.4   | 77.4    | 78.0    | 78.0     | 78.3            | •          | 78.7            | 78.7             | 78.7            | 79.4  | 79.4              | 79.4              | 79.4              | 81.3             | 81.3              | •    | 82.2 | 82.4 | 82.4 | 82.4               | 82.4 |                   | 82.6  | 86.0         |           |              | 86.5             | •                 | •                | 89.3         | •                 |
| 127               | 107    | 107     | 663     | 107      | 107             | 109        | 109             | 109              | 109             | 127   | 127               | 107               | 107               | 251              | 107               | 129  | 107  | 127  | 127  | 107                | 107  | 4852              | 107   | 240          | 240       | 107          | 107              | 107               | 127              | 107          | 107               |
| 15                | 16     | 15      | 15      | 15       | 15              | 16         | 14              | 14               | 10              | 16    | 15                | 16                | 15                | 15               | 9                 | .5   | 15   | 16   | 15   | 16                 | 15   | 15                | 15    | 14           | 14        | 15           | 14               | 14                | 17               | 17           | 15                |
| US-10-462-062-181 | -472-9 | -10-462 | 0-412-4 | -10-412- | US-10-412-406-4 | 0-745-455- | US-10-172-785-3 | US-10-165-732A-3 | US-09-802-083-3 | -10-  | US-10-462-062-182 | US-10-472-905A-96 | US-10-462-062-107 | US-10-239-656-65 | US-09-158-120A-20 | - 1  | -10- |      | -10- | US-10-472-905A-100 | •    | -412              | -412- | -10-127-890- | -10-127-8 | -10-325-696- | US-10-340-189-87 | US-10-127-890-125 | US-10-774-076-19 | -10-774-076- | US-10-325-696-27  |
| 181,              | 90, J  | 101,    | 32,     |          | 4               | س<br>س     | ω               | u<br>'           | u<br>'          | e 12: | 18                | Sequence 96, Appl | e 10              | e 65             | 20, 1             | e 16 | e 14 | e 10 | 16   | e 100              | 148  | Sequence 33, Appl | ۲     | 146          | e 147     | e 65,        | e 87,            | e 125             | e 19,            | 14,          | Sequence 27, Appl |

## ALIGNMENTS

US-10-774-076-3

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RESULT 2
US-10-774-076-11
; Sequence 11, Ap
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; TYPE: PRT
; ORGANISM: mus sp.
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Publication No. US20040210040A1
GENERAL INFORMATION:
APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and TITLE OF INVENTION: Psoriasis
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin version 3.2
SEQ ID NO
                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 563; DB 1
Best Local Similarity 100.0%; Pred. No. 6e-42;
Matches 107; Conservative 0; Mismatches
                                                                                                                  61
                                                                                                                                            61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                        1 DIKWTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS
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                                                                                                                  RFSGSGSGODYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
    Application US/10774076
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                    RESULT 4
US-10-436-783-1
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; ORGANISM: Homo Sapiens
US-10-436-782-33
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                                                                                                                                                                                                                                                          Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PASEQ ID NO 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 107;
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Best Local Similarity
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LENGTH: 127
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/418,213
PRIOR FILING DATE: 2003-04-03
NUMBER OF SEQ ID NOS: 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,322
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/418,213
PRIOR FILING DATE: 2002-10-14
DELICA APPLICATION NUMBER: 60/418,213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 10271-097
CURRENT APPLICATION NUMBER: US/10/436,782
CURRENT FILING DATE: 2003-05-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Langermann, Solomon
TITLE OF INVENTION: EphA2 Monoclonal Antibodies and Methods of Use Thereof
FILE REFERENCE: 10271-097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Kinch, Michael APPLICANT: Carles-Kinch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OF INVENTION: Psoriasis
                                                                                                                                                                                                                                                                                                                                                                                         ENGTH: 107
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                                                                                                                  61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
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Application US/10436783
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Kiener, Peter
                                                                                                                                                                                                                                                      Conservative
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100.0%; Pred. No. 7.2e-42;
Vative 0; Mismatches 0;
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Pred. No. 2.5e-41;
2; Mismatches 0;
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RESULT 5
US-10-340-189-26
US-10-340-189-26
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; Publication No. US20030229207A1
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US-10-436-783-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 1
LENGTH: 107
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 98.8%;
Best Local Similarity 98.1%;
Matches 105; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/418,204
PRIOR FILING DATE: 2002-10-14
PRIOR APPLICATION NUMBER: 60/460,358
PRIOR FILING DATE: 2003-04-03
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/436,783
CURRENT FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,368
PRIOR FILING DATE: 2002-05-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Kinch, Michael
APPLICANT: Carles-Kinch, Kelly
TITLE OF INVENTION. EphA2 Agonistic Monoclonal Antibodies and Methods of Use Thereof
FILE REFERENCE: 10271-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
ATTORNEY/AGENT INFORMATION:
NAME: MCNICholas, Janet M.
REGISTRATION NUMBER: 32,918
                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/245,202A
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIAL Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/340,189
FILING DATE: 10-Jan-2003
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Studnicka, Gary M.
TITHE OF INVENTION: Modified Antibody Variable Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFFYTFGGGTKLEIK 107
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                                                                                                                                                                             APPLICATION NUMBER: 08/082,842 FILING DATE: 23-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: McAndrews, Held & Malloy, Ltd.
STREET: 500 w. Madison Street, 34th Floor
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RFSGSGSGQDYSLTISSLEYEDMGIYYCLKYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
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Pred. No. 2.5e-41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 107;
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TELEPHONE: 312/707-8889 TELEFAX: 312/707-9155

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; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-325-696-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-10-325-696-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 103; Conservative
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Best Local Similarity
                                                                                                                   TELEPAX: 312/707-9050
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
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INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/10/325,696
FILING DATE: 18-Dec-2002
CLASSIPICATION: <UNKnown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/097,980
FILING DATE: 16-UN-1998
APPLICATION NUMBER: 09/107,669
FILING DATE: 13-AUG-1993
APPLICATION NUMBER: PCT/US92/10906
FILING DATE: 14-DEC-1992
APPLICATION NUMBER: DCT/US92/10906
FILING DATE: 14-DEC-1992
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/808,464 FILING DATE: 13-DEC-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 26:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 500 We
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RFSGSGSGQDYSLTISSLDYEDMGIYYCQQYDESPWTFGGGTKLEIK 107
                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 32,918
                                                                                                                                                                                                                                                                      NAME: Janet M. McNicholas, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: IL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: McAndrews, Held & Malloy, Ltd.
STREET: 500 West Madison Street, 34th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60661
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Pred. No. 5.1e-40;
                                                                                                                                                                                                                             11023US06/200-71.P1.C3
                     26:
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RESULT 7
US-10-127-890-123
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                                          US-10-127-890-123
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Best Local Similarity
Matches 103; Conserva
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  Query Match
                                                                                                                                                                              TELEX: 650 388-1248
INFORMATION FOR SEQ ID NO: 123:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                             NAME: MCNicholae, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 200-70.P4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/707-8889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/127,890
FILING DATE: 23-Apr-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 60661
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                           MOLECULE TYPE: protein SEQUENCE DESCRIPTION: 9
                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: McAndrews,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Better, Marc D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
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                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/646,360
FILLING DATE: 13-MAY-1996
APPLICATION NUMBER: PCT/US94/05348
FILLING DATE: 12-MAY-1994
APPLICATION NUMBER: US 08/064,691
FILLING DATE: 12-MAY-1993
APPLICATION NUMBER: US 07/988,430
FILLING DATE: 09-DEC-1992
APPLICATION NUMBER: US 07/901,707
FILLING DATE: 19-JUN-1992
APPLICATION NUMBER: US 07/787,567
FILLING DATE: 04-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKPGKSPKTLIYRANRLVDGVPS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RFSGSGSQDYSLTISSLDYBDMGIYYCQQYDESPWTFGGGTKLEIK 107
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                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Illinois
COUNTRY: USA
                                                                                                                                                             LENGTH: 107 amino acids
                                                                                                                                                                                                                                                TELEFAX: 312/707-9155
                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Chicago
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b. US20030166196A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carroll, Stephen F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EE: McAndrews, Held & Malloy, Ltd.
500 West Madison Street, 34th floor
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96.3%;
  94.3%;
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                                                             SEQ ID NO: 123:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
  Score 531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 541; DB 15;
Pred. No. 5.1e-40;
  DB 14;
Length 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 107;
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Matches

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US-09-158-120A-21
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SEQUENCE CHARACTERISTICS:
LENGTH: 107 AMINO ACIDS
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-158-120A-21
                                                                                                                                                                                                                                                                     Query Match
Best Local :
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GRNERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: LI
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Olstein, Elliot M.
REGISTRATION NUMBER: 24,025
REFERENCE/DOCKET NUMBER: 469201-367
TELECOMMUNICATION INFORMATION:
TELEPHONE: 973-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/290,592
FILING DATE: August 15, 1994
APPLICATION NUMBER: 07/813,372
FILING DATE: December 23, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: Windows95
SOFTWARE: MS Word 97
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Human Murine Chimeric Antibodies Against
TITLE OF INVENTION: Respiratory Syncytical Virus
NUMBER OF SEQUENCES: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/158,120A FILING DATE: September 21, 1998 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI
ADDRESSEE: STEWART & OLSTEIN
                                                                                                               61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                 99;
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                                                                                          RFSGSGSGOEYSLTISSLEFEDMGIYYCLQFHEFPYTFGGGTKLEIK 107
                                                                                                                                                                                            DIKMTQSPSSMYASLGERVTITCKASQDINSYLSWFQQKDGKSPKTLIYRANRLVDGVPS 60
                                                                                                                                                               DIKMTQSPSSMYVSLGERVTITCKASQDINRYLNWFQQKPGKSPKTLIHRANRLVDGVPS
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NEW JERSEY
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                                                                                                                                                                                                                                                                                                                                             PROTEIN
                                                                                                                                                                                                                                                                 93.6%;
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Pred. No. 8.7e-39;
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                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                               Length 107;
                                                                                                                                                                                                                                           Indels
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HOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-797-481-2
                                                                                                                                                                                US-09-844-736-4
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                                                                                                                       Sequence 4, Application US/09844736 Patent No. US20020041872A1 GENERAL INFORMATION:
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Patent No. US20010047083A1
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 09/361,772
FILING DATE: 27-JUL-1999
APPLICATION NUMBER: US 08/579,940
FILING DATE: 28-DEC-1995
APPLICATION NUMBER: US 08/365,484
FILING DATE: 28-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: CATHERINE M. POLIZZI
                                                                                                                                                                                                                                                                                                                                                                                                                            Local
TITLE OF INVENTION: METHODS OF DELAYING DEVELOPMENT OF
CEA-ASSOCIATED TUMORS USING ANTI-IDIOTYPE ANTIBODY 3H1
                                                                                              APPLICANT: Chatterjee, Malaya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: (650) 813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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ADDRESSEE: MORRISON & FOERSTER
STREET: 755 Page Mill Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MURINE ANTI-IDIOTYPE ANTIBODY 3H1
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                                                                                                                                                                                                                                                                                                                                             1 DIKMTQSPSSMYASIGERVTITCKASQDINSYISWFQQKPGKSPKTLIYRANRLVDGVPS
                                                                                                                                                                                                                                                                                                                                                                                                        ;86
                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 142 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/797,481
FILING DATE: 28-Feb-2001
CLASSIFICATION: CUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (650) 494-0792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 40,130
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                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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Chatterjee, Sunil K.
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91.6%;
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Pred. No. 3.2e-38;
5; Mismatches 4
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US-09-797-481-2 RESULT 9

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RESULT 11
US-10-162-396-4
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Publication No. US20030077274A1
GENERAL INFORMATION:
APPLICANT: Chatterjee, Malaya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/844,736
FILING DATE: 09-Apr-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/838,692
PILING DATE: APPLICATION DATA:
APPLICATION NUMBER: 08/838,692
APPLICATION NUMBER: 08/838,692
APPLICATION NUMBER: 0130
REFERENCE/DOCKET NUMBER: 30414-20004.01
TELEPHONE: (415) 813-5600
TELEPAX: (415) 494-0792
TELEX: 706141
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
                                                                                                                                                                                                                                                                 Chatterjee, Sunil K.
TITLE OF INVENTION: METHODS OF DELAYING DEVELOPMENT OF
CEA-ASSOCIATED TUMORS USING ANTI-IDIOTYPE ANTIBODY 3H1
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ADDRESSEE: MORRISON & FOERSTER
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                                                                                                                                                     CITY: PALO ALTO
STATE: CA
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                                                                                                                                     COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                             Chatterjee, Malaya
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                                                                                                                                                                                                                                                                                                                           Kenneth A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5; Mismatches
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Pred. No. 3.2e-38;
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RESULT 12
US-10-819-493-4
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Publication No. US20040253230A1
GENERAL INFORMATION:
APPLICANT: Chatterjee, Malaya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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COUNTRY: USA
ZIF: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNUBER: US/10/819,493
FILING DATE: 06-Apr-2004
CLASSIFICATION UNUBER: US 10/162,396
FILING DATE: June 3, 2002
APPLICATION NUMBER: US 10/162,396
FILING DATE: June 3, 2002
APPLICATION NUMBER: US 09/844,736
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APPLICATION NUMBER: US 09/844,736

PILING DATE: April 27, 2001

APPLICATION NUMBER: US 08/838,692

PILING DATE: April 9, 1997

APPLICATION NUMBER: US 60/044,455

PILING DATE: April 12, 1996

APPLICATION NUMBER: US 08/631,085

PILING DATE: April 12, 1996

APPLICATION NUMBER: US 08/631,085

PILING DATE: April 12, 1996

APPLICATION NUMBER: US 08/631,085
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ADDRESSEE: MORRISON & FOERSTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chatterjee, Sunil K.
TITLE OF INVENTION: METHODS OF DELAYING DEVELOPMENT OF
CEA-ASSOCIATED TUMORS USING ANTI-IDIOTYPE ANTIBODY 3H1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear SEQ ID NO: 4:
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REGISTRATION NUMBER: 40,130
REFERENCE/DOCKET NUMBER: 304142000402
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 DIKMTQSPSSMYASLGERVTITCKASQDINGYLNWFQQEPGKSPKTLIYRANRLIDGVPS
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                                                                                                                                                                                                                                                                                                                                                            STATE: CA
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                                                                                                                                                                                                                                                                                                                                                                                     CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 755 PAGE MILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 142 amino acids
TYPE: amino acid
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91.6%;
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Pred. No. 3.2e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 142;
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RESULT 13
US-10-340-189-27
US-10-340-189-27
USequence 27, Application US/10340189
Publication No. US20030229207A1
Publication No. US20030229207A1
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TELEX: 706141
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
                                                                                                       APPLICATION NUMBER: US/10/340,189
FILING DATE: 10-Jan-2003
CLASSIFICATION: 530
PRIOR APPLICATION DATE: APPLICATION DATE: US/09/245,202A
APPLICATION NUMBER: US/09/245,202A
FILING DATE: CUNCHOMD
APPLICATION NUMBER: 08/082,842
FILING DATE: 23-UN-1993
APPLICATION NUMBER: PCT/US92/10906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: April 27, 2001
APPLICATION NUMBER: US 08/838,692
FILING DATE: April 9, 1997
APPLICATION NUMBER: US 60/044,455
FILING DATE: April 12, 1996
APPLICATION NUMBER: US 08/631,085
FILING DATE: April 12, 1996
APPLICATION NUMBER: US 08/631,085
FILING DATE: April 12, 1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
ATTORNEY/AGENT INFORMATION: NAME: McNicholas, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Jacobson, Jill
REGISTRATION NUMBER: 40,030
REFERENCE DOCKET NUMBER: 304142000403
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
NUMBER OF SEQUENCES: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                       FILING DATE: 14-DEC-1992
APPLICATION NUMBER: US 07/808,464
FILING DATE: 13-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIKWTQSPSSMYASLGERVTITCKASQDINGYLNWFQQEPGKSPKTLIYRANRLIDGVPS
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500 W. Madison Street, 34th Floor
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Pred. No. 3.2e-38;
5; Mismatches 4;
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US-10-325-696-27; Sequence 27, Applicati; Publication No. US2004; GENERAL INFORMATION:
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                                                                                   INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
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INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/808,464 FILING DATE: 13-DEC-1991 ATTORNEY/AGENT INFORMATION:
MOLECULE TYPE: protein
                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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ADDRESSEE: McAndrews,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Studnicka, Gary M.
TITLE OF INVENTION: Modified Antibody Variable Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
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                                       LENGTH: 107 amino acids
TYPE: amino acid
                                                                                                                                                                                    REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11023US06/200-71.P1.C3
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/097,980 FILING DATE: 16-JUN-1998 APPLICATION NUMBER: 08/107,669 FILING DATE: 13-AUG-1993 APPLICATION NUMBER: PCT/US92/10906 FILING DATE: 14-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/10/325,696
FILING DATE: 18-Dec-2002
CLASSIFICATION: <Unknown>
                                                                                                                             TELEFAX: 312/707-9050
                                                                                                                                                                                                                                NAME: Janet M. McNicholas, Ph.D.
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                                                                                                                                              TELEPHONE: 312/707-8889
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STREET: 500 West Madison Street, 34th Floor
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TELEFAX: 312/707-9155
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No. US20040005630A1
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Pred. No. 4e-37;
6; Mismatches
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APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolff, et al.
FITTE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and TITLE OF INVENTION: Psoriasis
FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin version 3.2
SEQ ID NO 14
LENGTH: 107
TYPE: PRT
ORGANISM: Artificial
FEATURE: OTHER INFORMATION: Humanized antibody
US-10-774-076-14
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US-10-774-076-14
; Sequence 14, Application US/10774076
; Publication No. US20040210040A1
; GENERAL INFORMATION:
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Search completed: December 29, 2004, 18:41:57 Job time: 64.8643 secs
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                                                                                                                                                                                                                                                Query Match 89.3%; Score 503; DB 17; Length 107; Best Local Similarity 87.9%; Pred. No. 1.1e-36; Matches 94; Conservative 8; Mismatches 5; Indels (
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Best Local Similarity 89.7%;
Matches 96; Conservative
                                                                              61 RFSGSGSGQDYSLTISSLEYEDMGIYYCLQYDEFPYTFGGGTKLEIK 107
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                                                                                                                                                               1 DIQMTQSPSSLSASVGDRVTITCKASQDINSYLSWFQQKPGKAPKTLIYRANRLVDGVPS
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Maximum Match 100%
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being priand is derived by analysis of the total score distribution.
                   560.5
560.5
560.5
560.5
548.5
523.5
517
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1: /cgn2_6/ptodatca/2/pubpaa/USO7_PUBCOMB.pep:*

2: /cgn2_6/ptodatca/2/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodatca/2/pubpaa/USO6_NEW_PUB.pep:*

4: /cgn2_6/ptodatca/2/pubpaa/USO6_PUBCOMB.pep:*

5: /cgn2_6/ptodatca/2/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodatca/2/pubpaa/USO7_NEW_PUB.pep:*

7: /cgn2_6/ptodatca/2/pubpaa/USO8_PUBCOMB.pep:*

7: /cgn2_6/ptodatca/2/pubpaa/USO8_PUBCOMB.pep:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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             US-10-774-076-2
US-10-774-076-9
US-10-774-076-12
US-10-774-076-17
US-10-462-062-139
US-10-462-062-153
US-10-462-062-153
US-10-462-062-154
US-10-372-719-2
US-10-365-123-28
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                                                                                                                                                                                                                                                                Description
             Sequence 2, Appli
Sequence 9, Appli
Sequence 12, Appl
Sequence 17, Appl
Sequence 139, App
Sequence 153, App
Sequence 154, App
Sequence 2, Appli
Sequence 2, Appli
Sequence 28, Appli
Sequence 28, Appli
Sequence 28, Appli
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| 45                | 44               | 43     | 42           | 41    | 40           | 39               | 38   | 37              | 36              | 35              | 34      | 33              | 32   | 31   | 30    | 29               | 28          | 27                | 26   | 25     | 24                | 23              | 22           | 21              | 20              | 19      | 18              | 17              | 16                | 15              | 14              |  |
|-------------------|------------------|--------|--------------|-------|--------------|------------------|------|-----------------|-----------------|-----------------|---------|-----------------|------|------|-------|------------------|-------------|-------------------|------|--------|-------------------|-----------------|--------------|-----------------|-----------------|---------|-----------------|-----------------|-------------------|-----------------|-----------------|--|
| 490               | 490              | 490.5  | 490.5        | 90.   | 90.          | 90.              | 9    | 492             | 492             | 492             | 494     | 496             | 496  | 4    | 498.5 | 502              | <u>۵</u>    | 503.5             | •    | 12.    | 12.               | 14              | 14.          | 514.5           | 14.             | 14.     | 14.             | 14.             | 514.5             | •               | 514.5           |  |
| •                 | 75.6             | •      | 75.7         | 75.7  | •            | 75.7             | 75.7 | ٠               | 75.9            |                 | ٠       | 76.5            | ٠    |      | 76.9  | ٠                |             | 77.7              | 77.7 | •      | 79.1              | 79.4            | ٠            | 79.4            | 79.4            | 79.4    | 79.4            | 79.4            | 79.4              | 79.4            | 79.4            |  |
| 130               | 117              | 135    | 135          | 135   | 116          | 116              | 116  | 117             | 117             | 117             | 136     | 117             | 117  | 117  | 116   | 119              | 137         | 118               | 116  | 137    | 118               | 152             | 152          | 152             | 152             | 152     | 152             | 152             | 152               | 152             | 152             |  |
| 9                 | 17               | 15     | 15           | 14    | 15           | 15               | 14   | 17              | 14              | 9               | 16      | 14              | 14   | 10   | 10    | 10               | 15          | 15                | 10   | 15     | 15                | 17              | 17           | 17              | 17              | 16      | 16              | 16              | 16                | 16              | 16              |  |
| US-09-839-447A-3  | US-10-816-938-10 | -357-6 | -10-389-417- | -155- | -10-452-357- | US-10-389-417-15 |      | US-10-764-140-4 | US-10-293-417-4 | US-09-293-854-4 | -10-768 | US-10-230-880-4 | -10- | -09- | 40-   | US-09-215-163-44 | -10-462-062 | US-10-462-062-143 | 9-94 | -10-46 | US-10-462-062-144 | US-10-642-099-2 | -10-642-119- | US-10-642-117-2 | US-10-642-118-2 | 20-850- | US-10-621-269-2 | US-10-642-124-2 | -10-642-122-      | US-10-642-060-2 | US-10-642-120-2 |  |
| Sequence 3, Appli | 10,              | 69,    |              | 60,   | 56,          | e 15,            | 15,  | e 4, 1          | e 4,            | 4, 1            | 7,      | 4.              | 4    | 4.   | 14,   | 44,              | e 157       | 143,              | 90,  | 158,   | 14                | e 2,            | æ            | e 2,            | e<br>2,         | e<br>2, | e<br>2,         | e<br>2,         | Sequence 2, Appli | N               | 'n              |  |

### ALIGNMENTS

RESULT 1

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RESULT 2
US-10-774-076-9
; Sequence 9, Application US/10774076
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                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 39
SOPTWARE: PatentIn version 3.2
SEQ ID NO 2
LENGTH: 119
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/10774076
Publication No. US20040210040A1
GENERAL INFORMATION:
APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
TITLE OF INVENTION: Provises
                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 05882.0064.NPUS01
CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
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                                                                                                                                                                                                  1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                                                                                     h 100.0%; Score 648; DB 17; Similarity 100.0%; Pred. No. 2.7e-52; 19; Conservative 0; Mismatches 0;
                                                                                                                                        SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                                                                             BIQLQQSGPELVKPGASVKVSCKASGYAPTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                    SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
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US-10-774-076-12
Sequence 12, Application US/10774076
Publication No. US20040210040A1
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                                                   Sequence 17, Application US/10774076 Publication No. US20040210040A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                      Best
                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: PatentIn version 3.2
SEQ ID NO 12
LENGTH: 119
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Protein Design Labs, Inc.
APPLICANT: Landolfi, et al.
 TITLE OF INVENTION: Amphiregulin Antibodies
                  APPLICANT: Protein Design Labs, Inc. APPLICANT: Landolfi, et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local Similarity
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SEQ ID NO 9
LENGTH: 138
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 05882.0064.NPUS01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Amphiregulin Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Publication No. US20040210040A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Amphiregulin Antibodies and TITLE OF INVENTION: Psoriasis FILE REFERENCE: 05882.0064.NPUS01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Humanized antibody
                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                           61 SQXFKGKATLTVDKSTSTAYMELSSLRSEDTAVYYCARRGNFPYYFDYWGQGTLVTVSS 119
                                                                                                                                                                                                                                                                                                      101;
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                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                     SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                                                                                                      EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                            EVQLVQSGABVKKPGASVKISCKVSGYAFTNYNMYWVRQAPGKGLEWIGYIDPYYGDPGY 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SQKFKGKATLIVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
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                                                                                                                                                                                                                                                                                                                 Score 564;
Pred. No. 1.
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Pred. No. 3.1e-52;
                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                 DB 17; Length 119; ..6e-44;
 and Their Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Their Use to Treat
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to Treat Cancer
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FILE REFERENCE: 0582.0064.NPUS01
CURRENT APPLICATION UMMBER: US/10/774,076
CURRENT FILING DATE: 2004-02-06
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin version 3.2
SEQ ID NO 17
LENGTH: 138
TYPE: PRT
ORGANISM: Artificial
FEATURE:
FEATURE: TYPES INFORMATION
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US-10-462-062-139
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                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. SEQ ID NO 139
                                                                                                                                                               Matches 107;
                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 139, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                     1899
                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/462,062
CURRENT FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST HUMAN TISSUE FACTOR (TF)
TITLE OF INVENTION: AND PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODIE
FILE REFERENCE: 053466-0360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SATO, KOR
APPLICANT: ADACHI,
                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 183
                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: Amino acid sequence of OTHER INFORMATION: H chain V region of anti TF mouse monoclonal antibody ATR-2
                                                                                                                                                                                                                                                                                                                                                               ENGTH: 118
                                                                                                                                                                               Local Similarity
                      61 SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101;
                                                                                               1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 SQKFKGKATLTVDKSSSTAYMHLNSLTSBDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 EVQLVQSGAEVKKPGASVKISCKVSGYAFTNYNWYWVRQAPGKGLEWIGYIDPYYGDPGY
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NOKFKGKATLTVDKSSSTAFMHLNSLTSEDSAVYYCARGGE-GYYFDYWGQGTTLTVSS
                                                                            BIQLQQSGPELVKPGASVKVSCKASGYSFTDYNMYWVKQSHGKSLEWIGYIDPYNGGTIY
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o. US20040044187A1
                                                                                                                                                               Conservative
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                                                                                                                                                        Score 560.5; DB 1
Pred. No. 3.3e-44;
4; Mismatches 7
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Pred. No. 1.8e-44;
9; Mismatches '9;
                                                                                                                                                                                              DB 15; Length 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OF THE HUMANIZED ANTIBODIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 138;
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RESULT 6 US-10-462-062-140

Sequence 140, Application US/10462062 Publication No. US20040044187A1 GENERAL INFORMATION:

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US-10-462-062-153; Sequence 153, Application US/10462062; Publication No. US20040044187A1
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TITLE OF INVENTION: AND PROCESS OF PRODUCTION OF THE HUMANIZED ANTIBODIES
FILE REFERENCE: 053466-0360
CURRENT APPLICATION NUMBER: US/10/462,062
CURRENT FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR FILING DATE: 1999-04-03
NUMBER OF SEQ ID NOS: 183
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 140
LENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: JP 10-91850
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
SOPTWARE: PatentIn Ver. 2.1
SEQ ID NO 153
LENGTH: 137
                                                                                                                                                                                         Matches
                                                                                                                                                                                                             Query Match
Best Local :
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Best Local
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APPLICANT: ADACHI, HUMANIZED ANTIBODIES AGAINST HUMAN TISSUE FACTOR (TF)
TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST HUMANIZED ANTIBODIES
FILE REFERENCE: 053466-0360
CURRENT APPLICATION NUMBER: US/10/462,062
CURRENT FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: PCT/JP99/01768
PRIOR FILING DATE: 1999-04-02
PRIOR FILING DATE: 1999-04-02
                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Full-length amino aci OTHER INFORMATION: sequence for H chain V region of anti-TF mouse monoclonal OTHER INFORMATION: antibody ATR-2
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ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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NQKFKGKATLTVDKSSSTAFMHLNSLTSEDSAVYYCARGGE-GYYFDYWGQGTTLTVSS
                            SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                      EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
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                                                                                           EIQLQQSGPELVKPGASVKVSCKASGYSFTDYNMYWVKQSHGKSLEWIGYIDPYNGGTIY 79
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                                                                                                                                                                                       Conservative
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Pred. No. 3.3e-44;
4; Mismatches 7;
                                                                                                                                                                                                          Score 560.5; DB 1
Pred. No. 3.9e-44;
                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                DB 15; Length 137;
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: ST2146 heavy chain variable region protein sec US-10-372-719-2
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US-10-462-062-154
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  Best Loc
Matches
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APPLICANT: DE SANTIS, RITA
APPLICANT: ANASTASI, ANNA MARIA
                                      Query Match
                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/10372719
Publication No. US20040005643A1
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Best Local
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: SATO, KOH
APPLICANT: ADACHI, HIDEXI
APPLICANT: ADACHI, HUMANIZED ANTIBODIES AGAINST HUMAN TISSUE FACTOR (TF)
TITLE OF INVENTION: HUMANIZED ANTIBODIES OF PRODUCTION OF THE HUMANIZED ANTIBODIES
FILE REFERENCE: 053466-0360
FILE REFERENCE: 053466-0360
FILE REPERENCE: 053466-0360
FILE PRIOR APPLICATION NUMBER: PCT/JP99/01768
FRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 183
SOPTWARE: PATENTIN Ver. 2.1
                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2002-02-26
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/372,719
CURRENT FILING DATE: 2003-02-25
PRIOR APPLICATION NUMBER: 60/359,299
PRIOR FILING DATE: 2002-02-26
                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: ANTI-HUMAN TENASCIN MONOCLONAL ANTIBODY FILE REFERENCE: 2818-141
                                                                                                                                                                                 LENGTH: 120
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Full-length amino acid OTHER INFORMATION: sequence for H chain V region of anti-TF mouse monoclonal OTHER INFORMATION: antibody ATR-3
                                                                                                                                        ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 137
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                     Local
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o. US20040044187A1
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  Conservative
                 84.6%;
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Pred. No. 3.9e-44;
Score 548.5; DB 1
Pred. No. 4.3e-43;
6; Mismatches 9
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EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYMVKQSHGKSLEWIGYIDPYYGDPGY

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; OTHER INFORMATION: amino acid sequence for murine 19/2 heavy chain variable region US-10-365-123-28
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Sequence 28, Application US/10365123

; Publication No. US20040053365A1
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TITLE OF INVENTION: ANIT-ALPHABETA3 HUMANIZED MONOCLONAL
TITLE OF INVENTION: ANITADIES
FILE REFERENCE: P50629C1
CURRENT APPLICATION NUMBER: US/10/223,880
CURRENT FILING DATE: 2002-08-20
PRIOR APPLICATION NUMBER: 09/380,910
PRIOR APPLICATION NUMBER: 09/380,910
PRIOR FILING DATE: 1999-09-10
PRIOR FILING DATE: 1999-09-12
PRIOR FILING DATE: 1998-03-12
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/039,609
PRIOR APPLICATION NUMBER: 60/039,609
PRIOR FILING DATE: 1997-03-12
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       Query Match
                                                                                                                                                 SEQ ID NO 28
                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Renner, Christ
APPLICANT: Scott, Andrew
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Matches
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SEQ ID NO 2
                                                                                                                                                                   APPLICANT: Burgess, Antony
TITLE OF INVENTION: HUMANIZED GM-CSF ANTIBODIES
FILE REFERENCE: LUD 5729.1
CURRENT APPLICATION NUMBER: US/10/365,123
CURRENT FILING DATE: 2003-02-12
NUMBER OF SEQ ID NOS: 56
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                                                                          TYPE: PRT
ORGANISM: Mus musculus
FEATURE:
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                                                                                                                                  LENGTH: 139
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ORGANISM: Mus musculus
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   Score 523.5;
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Pred. No. 2.7e-41;
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   BB
 15;
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Length 139;
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US-10-769-612-3
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US-10-383-447-14
                                                                                                                                                             APPLICANT: Law, Debbie
APPLICANT: Gish, Kurt (
APPLICANT: Murray, Rich
APPLICANT: Culp, Patric
                                                                                                                                                                                                                                                    Sequence 3, Application US/10769612 Publication No. US20040141983A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2
SEQ ID NO 14
LENGTH: 117
TYPE: PRT
APPLICANT: Murray, Richard
APPLICANT: Culp, Patricia
TITLE OF INVENTION: Compositions Against Cancer Antigen LIV-1 And Uses Thereof
FILE REFERENCE: 05882.0129.CPUS08
CURRENT APPLICATION NUMBER: US/10/769,612
CURRENT FILING DATE: 2004-01-29
PRIOR APPLICATION NUMBER: 60/443,712
PRIOR APPLICATION NUMBER: 60/443,712
PRIOR FILING DATE: 2003-01-29
PRIOR APPLICATION NUMBER: 09/642,034
PRIOR FILING DATE: 2000-08-18
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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PRIOR FILING DATE: 2002-03-08
PRIOR APPLICATION NUMBER: US 60/463,812
PRIOR FILING DATE: 2002-12-27
NUMBER OF SEQ ID NOS: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Powers, David
TITLE OF INVENTION: Antibodies Against Cancer Antigen TMEFF2 and Uses Thereof
FILE REFERENCE: 05882.0138 NEUSO0
CURRENT APPLICATION NUMBER: US/10/383,447
CURRENT FILING DATE: 2002-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Bhaskar, Vinay
APPLICANT: de la Calle,
APPLICANT: Law, Debbie
APPLICANT: Caras, Ingrid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Heavy chain variable region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                      61 SQKFKGKATLIVDKSSSTAYMHINSLTSEDSAVYYCARRGNFPYYFDYMGQGTTLTVSS 119
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Ramakrishnan,
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Afar, Daniel
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Pred. No. 3.4e-40;
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APPLICATION NUMBER: 09/525,361 FILING DATE: 2000-03-15

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PRIOR APPLICATION NUMBER: 09/268,865
PRIOR FILING DATE: 199-03-15
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn version 3.2
SEQ ID NO 3
LENGTH: 17
TYPE: PRT
ORGANISM: Mus musculus
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US-10-642-120-2
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Sequence 2, Application US/10642060
Publication No. US20040131621A1
GENERAL INFORMATION:
APPLICANT: Thorpe, Philip B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/10642120 Publication No. US20040131610A1 GENERAL INFORMATION:
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Best Local :
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Best Local (
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APPLICANT: Soares, M. Melina
APPLICANT: Soares, M. Melina
APPLICANT: Ran, Sophia
TITLE OF INVENTION: Methods for Treating Viral Infections Using Antibodies to
TITLE OF INVENTION: Aminophospholipids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 4001.002900
CURRENT APPLICATION NUMBER: US/10/642,120
CURRENT FILING DATE: 2003-08-15
PRIOR APPLICATION NUMBER: US 10/621,269
PRIOR PILING DATE: 2003-07-15
PRIOR PPLICATION NUMBER: 60/396,263
PRIOR FILING DATE: 2002-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 09/453,137
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: 09/450,810
PRIOR FILING DATE: 1999-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 152
                                                                                                                                                                                                                                                                                                                                                      y Match 79.4%; Score 514.5; DB 16; Length 1 Local Similarity 80.0%; Pred. No. 7.7e-40; hes 96; Conservative 10; Mismatches 13; Indels
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SOFTWARE: PatentIn ver
SEQ ID NO 2
                                                                                                                                                                            Matches
                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ran, Sophia
TITLE OF INVENTION: Combinations and Kits for Treating Viral Infections Using AntiboriTITLE OF INVENTION: Aminophospholipids
                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 10/621,269 PRIOR FILING DATE: 2003-07-15 PRIOR APPLICATION NUMBER: 60/396,263 PRIOR FILING DATE: 2002-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 4001.002982
CURRENT APPLICATION NUMBER: US/10/642,060
CURRENT FILING DATE: 2003-08-15
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                                                                                                                                                                                                                                                                                  ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                           LENGTH: 152
TYPE: PRT
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                        61 SQKFKGKATLTVDKSSSTAYMHINSLTSEDSAVYYCARRGNF-PYYFDYWGQGTTTTVSS 119
80 NQKFRGKATLITVDKSSSTAYMQLKSLTSEDSAVYYCVKGGYYGHWYFDVWGAGTTVTVSS
                                                                                      20 EVQLQQSGPELEKPGASVKLSCKASGYSFTGYNMMWVKQSHGKSLEWIGHIDPYYGDTSY 79
                                                                                                            1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYMVKQSHGKSLEWIGYIDPYYGDPGY 60
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Similarity 80.0%;
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t; Pred. No. 7.7e-40;
10; Mismatches 13; Indels
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Search completed: December 29, 2004, 18:41:54 Job time: 74.8024 secs

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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                                                                                                 A Geneseq 23Sep04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
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648
I EIQLQSGPELVK
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521.928 Million cell updates/sec
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Maximum Match 100%
Listing first 45 summaries
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Copyright (c) 1993 - 2004 Compugen Ltd.
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and is derived by score No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.

## SUMMARIES

| 25       | 24       | 23       | 22                 | 21       | 20                 | 19                 | 18                 | 17       | 16       | 15       | 14                 | 13       | 12       | 11       | 10       | 9        | 8                  | 7                  | 6        | տ                  | 4.                 | ω                  | N        | ᆫ        | Result                |
|----------|----------|----------|--------------------|----------|--------------------|--------------------|--------------------|----------|----------|----------|--------------------|----------|----------|----------|----------|----------|--------------------|--------------------|----------|--------------------|--------------------|--------------------|----------|----------|-----------------------|
| 504.5    | 504.5    | 504.5    | 505                | 506.5    | 507.5              | 512                | 512.5              | 514.5    | 514.5    | 516.5    | 516.5              | 517      | 518.5    | 520.5    | 520.5    | 525.5    | 525.5              | 529                | 529.5    | 541                | 541                | 548.5              | 560.5    | 560.5    | Score                 |
| 77.9     | 77.9     |          |                    |          |                    | 79.0               |                    | 79.4     | 79.4     | 79.7     | 79.7               | 79.8     | 80.0     | 80.3     | 80.3     | 81.1     | 81.1               | 81.6               | 81.7     | 83.5               | 83.5               | 84.6               | 86.5     | 86.5     | Query<br>Match Length |
| 130      | 116      | 116      | 267                | 135      | 239                | 112                | 118                | 159      | 152      | 214      | 214                | 117      | 239      | 214      | 214      | 214      | 214                | 117                | 116      | 140                | 140                | 120                | 118      | 118      | •                     |
| N        | ω        | N        | w                  | N        | 7                  | տ                  | N                  | œ        | ω        | σ        | σ                  | 7        | 7        | o        | σ        | σ        | σ                  | N                  | N        | 7                  | 7                  | 7                  | ผ        | ν        | BB                    |
| AAW71886 | AAB12919 | AAW71882 | AAB09776           | AAR28669 | ADC79232           | AAE15811           | AAY52760           | ADJ57088 | ADJ57084 | ABP96755 | ABP96756           | ADC27445 | ADC79231 | ABP96764 | ABP96763 | ABP96760 | ABP96759           | AAW84093           | AAW95481 | ADK51711           | ADC24943           | ABR82930           | AAY52756 | AAY52755 | ID                    |
|          |          | Ant      | Aab09776 TMV 30K m | p12-h2.  | Adc79232 Control s | Aae15811 Human mAb | Aay52760 Anti-tiss | 3G4.     |          | HST      | Abp96756 TSH recep | •        | . Anti   | TSH      | TSH      | HST      | Abp96759 TSH recep | Aaw84093 Murine vi | Mouse d  | Adk51711 Murine 19 | Adc24943 Mouse 19/ | Abr82930 Anti-huma | Anti-    | ς.       | Description           |

|   | 135 2 AAW60866 135 3 AAY80293 467 6 AAE38408 590 2 AAW31751 590 2 AAW31751 590 3 AAB12908 116 2 AAW39889 116 2 AAW60864 119 2 AAW60864 119 2 AAW60864 119 2 AAW60869 110 2 AAW60869 111 2 AAW60869 111 2 AAW60822   |          | 44 496   | 43 496   | 42 497.5 | 41 497.5 |          |          |          |          | 36 501.5 |          |          | 33 503.5 |          |          |          |          |          |          |          |
|---|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|   | 3 AAV80066 3 AAV80293 6 AAB38408 2 AAW31751 2 AAW71888 3 AAB12908 2 AAW39889 2 AAW52759 2 AAW52759 2 AAW6064 2 AAW21819 2 AAW601752 2 AAW601752 2 AAW601752 2 AAW90226 2 AAW90226 2 AAW90217  | 76.5     | 76.5     | 76.5     | 76.8     | 76.8     | 76.8     | 76.9     | 77.1     | 77.4     | 77.4     | 77.5     | 77.5     | 77.7     | 77.7     | 77.9     | 77.9     | 77.9     | 77.9     | 77.9     | 77.9     |
|   | AAW00866 AAY80293 AABS8408 AAW71888 AABJ2908 AAW71818 AAW39889 AAW39889 AAW52759 AAW60864 AAY21819 AAW60864 AAY21819 AAW60864 AAY21819 AAW60864 AAY21819 AAW60864 AAY21819 AAW60864 AAY21819 AAW60864 | 117      | 117      | 117      | 580      | 268      | 263      | 116      | 137      | 162      | 120      | 119      | 116      | 118      | 116      | 590      | 590      | 590      | 467      | 135      | 135      |
| AAW6086 AAY80293 AAB38408 AAW31751 AAW31751 AAW31751 AAW317888 AAW39889 AAW39889 AAW21819 AAW21819 AAW21819 AAW21819 AAW21819 AAW21752 AAW21752 AAW39810 |   | σ        | σ        | ผ        | N        | N        | N        | N        | N        | N        | œ        | N        | N        | N        | N        | w        | N        | N        | 6        | w        | K        |
|   | Aaw60866 Aay980293 Aae38408 Aaw71898 Aaw11898 Aab12908 Aaw52759 Aaw60864 Aay21819 Adi26469 Aaw902175 Aaw90226 Aaw90226 Aaw90217 Aaw902217   | ABR42718 | ABR42700 | AAW71288 | AAW90217 | AAW90222 | AAW90226 | AAW39810 | AAR05090 | AAW01752 | ADI26469 | AAY21819 | AAW60864 | AAY52759 | AAW39889 | AAB12908 | AAW71888 | AAW31751 | AAE38408 | AAY80293 | AAW6U866 |

ALIGNMENTS

AAY52755 standard; protein; 118 ₿

## AAY52755;

26-JAN-2000 (first entry)

Anti-tissue factor mouse monoclonal antibody ATR-2 H chain V region.

Human tissue factor; TF; humanised; antibody; mouse monoclonal antibody; ATR-2; ATR-3; ATR-4; ATR-5; ATR-7; ATR-8; thrombotic disease; DIC; disseminated intravascular coagulation; immunogenicity; chimeric.

# Synthetic.

WO9951743-A1

14-OCT-1999.

02-APR-1999; 99WO-JP001768.

03-APR-1998; 98JP-00091850

(CHUS ) CHUGAI SEIYAKU KK.

Sato K, Adachi H, Yabuta N;

N-PSDB; AAZ33006. WPI; 1999-620204/53.

Humanised antibody recognizing human tissue factor, used for treatment disseminated intravascular coagulation.

Claim 1; Page 274; 291pp; Japanese.

containing the variable region of the H chain of a mouse monoclonal Ab recognising human tissue factor (hTF) and the constant region of the H chain of a human Ab. The variable region is one of six specified sequences (which are the H chain variable regions from mouse monoclonal Ab's ATR-2,3,4,5,7 or 8). Also described are chimeric Ab light (L) chains containing the variable region of the L chain of a mouse monoclonal Ab recognising human tissue factor (hTF) and the constant region of the L chain of a human Ab, the variable region being one of six specified sequences (which are the L chain variable regions from mouse monoclonal Ab's ATR-2,3,4,5,7 or 8). The chimeric Ab's can be used for the treatment The present invention describes chimeric antibody (Ab) heavy (H) chains

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containing the variable region of the H chain of a mouse monoclonal Abrecognising human tissue factor (hTF) and the constant region of the H chain of a human Ab. The variable region is one of six specified sequences (which are the H chain variable regions from mouse monoclonal Abrecognising the variable region of the L chain of a mouse monoclonal Abrecognising human tissue factor (hTF) and the constant region of the L chain of a human Ab, the variable region being one of six specified sequences (which are the L chain variable regions from mouse monoclonal Abrecognising human Ab, the variable region being one of six specified sequences (which are the L chain variable regions from mouse monoclonal Abrecognising human Ab, the variable region being one of six specified sequences (which are the L chain variable regions from mouse monoclonal Abrecognistic of the mouse monoclonal abrecognistic of the mouse monoclonal antibody but greatly reduced immunogenicity. AAZ33001 to AAZ33091 and Y527007 to AAY52767 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Humanised antibody recognizing human tissue factor, used disseminated intravascular coagulation.
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ATR-2; ATR-3;
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Pred. No. 5.7e-40;
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Matches 107
                                         antibody, its fragment, recombinant or conjugate derivatives, immunoglobulin molecule and biotinylated derivatives are useful for a diagnostic means for detecting, or preparing a medicament for treating, diseases expressing tenascin, e.g. tumor such as gliomas, mammary, cystic brain tumours, lung carcinomas, fibrosarcomas, and squamous cell carcinomas. The diagnostic means is used in in vivo imaging techniques. The medicament is in the form of a kit suitable for carrying out the three-step pre-targeting method. The antibody, in combination with a second tenascin-specific antibody are useful in sandwich assay for detecting the level of circulating tenascin. The present sequence represents the ST2146 MAb heavy chain variable region sequence
                                                                                                                                                                                                                                                                                                                                                      antibody (MAb) whose light and heavy chain variable region sequences their proteolytic fragments that bind to an antigenic epitope within EGF (epidermal growth factor)-like repeat of human tenasoin C. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention
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107; Conser
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Pred. No. 5.7e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heavy chain variable region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
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Query Match

84.6%;

Score 548.5;

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encodes a fusion protein comprising a chimerised antibody molecule, and a cumour necrosis factor (TNF) molecule or its fragment. The antibody specifically binds to a target. The fragment of the TNF molecule of specifically binds to a target. The fragment of the TNF molecule cossesses the cell killing properties of a full-length TNF molecule. Also described: (1) a chimeric fusion protein (1) encoded by the isolated nucleic acid molecule; (2) an expression vector comprising the isolated nucleic acid molecule operably linked to a promoter; and (3) a recombinant cell comprising the isolated nucleic acid molecule or the expression vector. (1) has antiinflammatory, antirheumatic, antibacterial, immunosuppressive, nephrotropic and antiarteriosclerotic activities. The nucleic acid is useful for the expression of proteins, especially antibodies, as well as fusion proteins that incorporate the antibody and a protein. The expression vector is useful in manufacturing a recombinant antibody (e.g. a fully human, humanized or chimeric antibody) in a eukaryotic cell. The antibody is useful in therapy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic acid, useful for producing humanized or chimeric antibodies, fusion proteins comprising the antibodies, which are G250-specific an ful for treating inflammatory conditions, e.g. rheumatoid arthritis c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003-679629/64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention describes an isolated nucleic acid molecule, which
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6; Mismatches
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Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              particularly for targeting G250 and blocking granulocyte-macrophage stimulating factor (GM-CSF), which is involved in the development of rheumatoid arthritis. The antibody is useful for treating inflammatory conditions, e.g. psoriasis, asthma, inflammatory bowel disease, multiple sclerosis, viral or bacterial pneumonia, septic shock, nephritis, or arteriosclerosis. The present sequence represente mouse 19/2 antibody heavy chain variable region, which is used in an example from the present
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Pred. No. 3.1e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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a defined 6629 bp sequence concatenated to the amino acid secencoded by nucleotides 1839-2825 of the 6629bp sequence. The antibodies have antiinflammatory, antiarthritic, and antirhed granulocyte macrophage colony stimulating factor (GM-CSF) specific antibody light chain or heavy chain. The invention further relates to chimerised granulocyte macrophage colony stimulating factor (GM-CSF) specific antibody light chain encoded by nucleotides 1357-1752 of a defined sequence of 6159 by concatenated to the amino acid sequence encoded by nucleotides 1366-2203 of the 6159by sequence; or a chimeric GM-CSF specific antibody heavy chain encoded by nucleotides 1357-1764 useful for rheumatoid Nucleic acids encoding chimeric granulocyte macrophage colony stimulating factor (GM-CSF) specific antibodies comprising a light and a heavy chain, useful for blocking effects of GM-CSF on cells, e.g. in preventing The invention relates to an isolated nucleic acid encoding Example <u>ب</u> SEQ ID NO 28; 81pp; English.

sequence The GM-CSF

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2003-679625/64.

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Renner

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Scott A,

Burgess A;

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RESULT 6
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Best Local S
Matches 98
The invention relates to methods for producing catalytic antibodies displayed on a phage. The method comprises: (a) generating a gene library of antibody-derived domains; (b) inserting coding for the domains into a phage expression vector; and (c) isolating the catalytic antibodies. The phage expression vector incorporates a histidine peptide in tandem with a myc peptide. The catalytic antibodies can be isolated by preparing an
                                                                                                                                                                                                                                                       Production of catalytic antibodies displayed on bacteriophages - comprises generating a gene library of antibody-derived domains inserting coding into a phage expression vector and isolating the catalytic
                                                                                                                                                                                           Example 4;
                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-105036/09.
N-PSDB; AAX00880.
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Kenten JH, Chiswell D, Mccafferty J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MCCA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JAN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Catalytic; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW95481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-JAN-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MART/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DARS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHISWELL D.
DARSLEY M J.
TITMAS R C.
MARTIN M T.
KENTEN J H.
SMITH R.
FITZGERALD K.
WILLIAMS R O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98;
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                                                                                                                                                                                   Fig 12A-J; 117pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams RO, Surr.
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Pred. No. 3.1e-38;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Smith R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
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of the
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Best Local 9
                                         New anti alpha v beta 3 vitronectin receptor antibodies - immunotherapeutic treatment of e.g. diabetic retinopathy, disorders, atherosclerosis, restenosis, cancers or osteop
                                                                                                                                                                                                                                                                                                                            12-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                              12-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mouse; human; vitronectin; alpha-v beta-3; receptor; restenosis; cancer metastasis; rheumatoid arthritis; atherosclerosis; angiogenesis; diabetic retinopathy; inflammation; macular degeneration; osteoporosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antigen; optionally immunising an animal with the antigen; generating a library of VH and VL domains from the immunised animal; cloning the VH and VL domains into a phage expression vector to generate phage display antibodies; selecting phage display antibodies which bind specifically the antigen; screening the selected phage display antibodies for catalytic activity to substrate; and isolating the catalytic antibodies, where the phage expression vector incorporates a histidine peptide in tandem with a myc peptide. The processes are used to produce catalytic antibodies, which can be used for in vivo activation of a prodrug. The present sequence represents a genetic sequence of heavy chain pattern A from mouse derived RT3 phage antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9840488-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Humanised antibody; monoclonal antibody; MAb; antibody engineering; mouse; human; vitronectin; alpha-v beta-3; receptor; restenosis; cancer;
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                                                                                                                                                                                                                                                                    SMIK ) SMITHKLINE BEECHAM CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           label= CDR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             label= CDR1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          alpha-v beta-3 receptor MAb VH region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                               Taylor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VKVSCKASGYAFTNYNIYWVKQSHGKSLEWIGYIDPYSGGSSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117
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Pred.
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No. 2.4e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypercalcaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
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                                                                     used for inflammatory
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Example 13;

Page 56; 97pp; English

osteoporosis.

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RESULT 8
ARB967S
ARB967S
ARB99
XX
ARB99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thyrotropin receptor; TSH receptor; epitope region; antibody; autoantibody; autoimmune disease; thyroid tissue; cytostatic; gene therapy; immune reaction; thyroid cancer.
WPI; 2003-290051/28
N-PSDB; ACC44914.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2003
                                                                                                                                                                                                                                                                                           23-AUG-2001; 2001GB-00020649
01-JUL-2002; 2002GB-00015212
                                                                                                                                                                                                                                                                                                                                                                                                                    21-AUG-2002; 2002WO-GB003831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003018632-A2
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                                                                                                                                                                                                              (RSRR-) RSR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVFYCARQNYGSFA----YWGQGTLVTVS 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARR--GNFPYYFDYWGQGTTLTVS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EIQLQQSGPEVVKPGASVKVSCKASGYAFTSYNMYWVKQSHGKSLEWIGYIDPYNGDTFY
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                                                                                                                            Furmaniak J,
                                                                                                                                                                                                          LTD
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                                                                                                                            Sanders JF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for detection and diagnosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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The present invention describes a polypeptide sequence comprising part or CC all of the primary structural conformation of one or more thyrotropin CC (TSH) receptor epitopes with which autoantibodies and/or lymphocytes CC produced in response to a TSH receptor interact. Also described: (1) one CC lymphocytes interact, as with the polypeptide sequence described above; CC lymphocytes interact, as with the polypeptide sequence described above; CC (2) a method of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a CC subject suspected of suffering from, susceptible to, having or recovering from autoimmune disease associated with an immune reaction to a TSH ceeptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH or naturally produced antibodies to the TSH receptor; and (4) a combination comprising the binding partner CC and/or tissue containing a TSH receptor, for simulating thyroid tissue, separate or CC sequential use in stimulating thyroid tissue, and/or tissue containing a TSH receptor. The specific binding partner is CC useful for the manufacture of a medicament for stimulating thyroid tissue containing a TSH receptor. The specific binding partner is CC useful for the manufacture of a medicament for stimulating thyroid tissue or themsure containing a TSH receptor, and for treating thyroid cancer. CC ACC4874 to ACC44905 and ABP96719 to ABP96750 represent TSH receptor antibody VH cand containing a TSH receptor, and for treating thyroid cancer. CC and VI domains given in ABP96751 to ABP96778, which are used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide sequence having part or all of the primary structural conformation of one or more TSH receptor epitopes, useful for treating a autoimmune disease associated with an immune reaction to a TSH receptor, e.g. thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 71; Fig 17; 196pp; English.
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Sequence 214 Ŗ,

exemplification

of the

present invention

Matches Query Match Best Local 9

98;

Conservative

Similarity

81.1%; Score 525.5; DB 6; 81.7%; Pred. No. 9.7e-37; tive 11; Mismatches 10;

Indels Length

214;

1 BIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY

60

61 HQKFKGKATLTVDKSSSTAYMRLNSLTSEDSAVYYCARRWDWDPYAMDYWGQGTSVTVSS

120

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ARESULT 9
AREPSTO 1
ID AREPS
XX AREPS
XX AREPS
XX AREPS
XX TASH
XX TAYT
XW TAYT
XW Gene
XX Gene
XX Synt
XX Synt
XX WO20
XX WO20
XX YO 21-A

ABP96760 standard; protein; 214 ₽

ABP96760;

05-JUN-2003 (first entry)

TSH receptor antibody 17D2 heavy chain amino acid sequence.

Thyrotropin receptor; TSH receptor; epitope region; autoantibody; autoimmune disease; thyroid tissue; c) gene therapy; immune reaction; thyroid cancer. n; antibody; cytostatic;

Synthetic

WO2003018632-A2

06-MAR-2003

21-AUG-2002; 2002WO-GB003831

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ABP96763
ID ABP9
XX
AC ABP9
XX
DT 05-0
XX
DE TSH
XX
Thy1
KW autc
KW gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a polypeptide sequence comprising part or CC all of the primary structural conformation of one or more thyrotropin (TSH) receptor epitopes with which autoantibodies and/or lymphocytes (I) one produced in response to a TSH receptor interact. Also described: (I) one CC lymphocytes interact, as with the polypeptide sequence described above; CC (2) a method of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a CC subject suspected of suffering from, susceptible to, having or recovering from autoimmune disease associated with an immune reaction to a TSH receptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH receptor, which is capable of binding partner does not comprise TSH receptor, where the containing a TSH receptor, for simulating thyroid tissue, and/or tissue containing a TSH receptor, for simulating thyroid tissue, separate or sequential use in stimulating thyroid tissue, and/or tissue containing a TSH receptor. A TSH receptor has cytostatic activity and can be used in immune reaction to a TSH receptor. The specific binding partner is capable for the manufacture of a medicament for stimulating thyroid tissue containing a TSH receptor. The specific binding partner is capable of a medicament for stimulating thyroid cancer. CC acceptation and ACC44915 and ABP96719 to ABP96750 represent TSH receptor and CC and VI domains given in ABP96711 to ABP96778, which are used in the capable of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Thyrotropin receptor; TSH receptor; epitope region; antibody; autoantibody; autoimmune disease; thyroid tissue; cytostatic; gene therapy; immune reaction; thyroid cancer.
                                                                                                                          05-JUN-2003
                                                                            TSH receptor antibody 14D3 heavy chain amino acid sequence.
                                                                                                                                                                                                        ABP96763 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 214 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide sequence having part or all of the primary structural conformation of one or more TSH receptor epitopes, useful for treating autoimmune disease associated with an immune reaction to a TSH receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 67; Fig 18; 196pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e.g. thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; ACC44915.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98;
                                                                                                                                                                                                                                                                                                                                                                                                                       1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                               SQXFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNF-PYYFDYWGQGTTLTVSS
                                                                                                                                                                                                                                                                                                                                                                                   DVQIQQSGPELVKPGASVKNSCKASGYSFTAYNWHWVKQTHGKSLEWIGYIDPYSGATSY
                                                                                                                                                                                                                                                                                                       HOKFKGKATLTVDKSSSTAYMRLNSLTSEDSAVYYCARRWDWDPYAMDYWGQGTSVTVSS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                      (first entry)
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2002GB-00015212.
                                                                                                                                                                                                      protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.1%;
81.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 525.5; DB 6
Pred. No. 9.7e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          214;
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The present invention describes a polypeptide sequence comprising part or all of the primary structural conformation of one or more thyrotropin (TSH) receptor epitopes with which autoantibodies and/or lymphocytes (TSH) receptor interact. Also described: (1) one or more receptor TSH epitopes with which the autoantibodies and/or (2) ymphocytes interact, as with the polypeptide sequence described: (1) one or more receptor TSH epitopes with which the autoantibodies and/or (2) an enthod of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a complete suspected of suffering from, susceptible to, having or recovering from autoimmune disease associated with an immune reaction to a TSH receptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH or naturally produced antibodies to the TSH receptor; and (4) a combination comprising the binding partner candor tissue or tissue containing a TSH receptor, for simulating thyroid tissue, and/or tissue containing a TSH receptor for simulating thyroid tissue, and/or tissue containing a TSH receptor has cytostatic activity and can be used in comprise the produced in immune reaction to a TSH receptor. The specific binding partner is cuseful for the manufacture of a medicament for stimulating thyroid tissue containing a TSH receptor. The specific binding partner is cuseful for the manufacture of a medicament for stimulating thyroid tissue containing a TSH receptor, and for treating thyroid cancer. CC ACC44874 to ACC44915 and ABP96751 to ABP96750 represent TSH receptor antibody VH and CC and VI domains given in ABP96751 to ABP96778, which are used in the
                                    exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polypeptide sequence having part or all of the primary structural conformation of one or more TSH receptor epitopes, useful for treating an autoimmune disease associated with an immune reaction to a TSH receptor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 71; Fig 21; 196pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    e.g. thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-AUG-2001; 2001GB-00020649
01-JUL-2002; 2002GB-00015212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Smith
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Furmaniak J,
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Sequence 214 AA;

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                                                                                            Matches
                                                                                                       Query Match
Best Local :
                                                                                                       Local Similarity
                       61
                                                                                          96;
            SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNF-PYYFDYWGQGTTLTVSS 119
                                            EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
NQKFEGKATLTVDKSSSTAYMQLNSLTSEDSAVYYCARRWDWDPYAMDYWGQGTSVTVSS
                                                                                            Conservative
                                                                                                     80.3%;
                                                                                          13;
                                                                                         Score 520.5; DB 6
Pred. No. 2.6e-36;
3; Mismatches 10
                                                                                                              DB 6;
                                                                                          10;
                                                                                          Indels
                                                                                                               Length
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                                                                                         Gaps
120
                                            60
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RESULT 11 ABP96764 ID ABP96 XX ABP96764 standard; protein; 214

ABP96764;

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The present invention describes a polypeptide sequence comprising part or CC all of the primary structural conformation of one or more thyrotropin CC (TSH) receptor epitopes with which autoantibodies and/or lymphocytes or more response to a TSH receptor interact. Also described: (1) one CC produced in response to a TSH receptor interact. Also described: (1) one CC lymphocytes interact, as with the polypeptide sequence described above; (2) a method of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a subject suspected of suffering from, susceptible to, having or recovering from autoimmune disease associated with an immune reaction to a TSH receptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH or naturally produced antibodies to the TSH receptor; and (4) a combination comprising the binding partner curvaind one or more further agents capable of stimulating thyroid tissue, and/or tissue containing a TSH receptor, for simultaneous, separate or CC and/or tissue containing a TSH receptor. A TSH receptor has cytostatic activity and can be used in gene therapy. The polypeptide, compositions and methods from the present cuseful for the manufacture of a medicament for stimulating thyroid tissue or tissue containing a TSH receptor, and for treating partner is cuseful for the manufacture of a medicament for stimulating thyroid cancer. CC ACC44974 to ACC44910 to ACC44931 and ACC44931 en ACC44933 encode the TSH receptor antibody VH and VL domains given in ABP96751 to ABP96778, which are used in the cemplatication of the present invention
                                                                                                                                                                                  Query Match
Best Local (
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                                                                                                                                                                                                                                                                                              Sequence 214 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e.g. thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Smith BR, Furmaniak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-AUG-2001;
01-JUL-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-AUG-2002; 2002WO-GB003831.
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                                                                                                                                                                                  Similarity
                                              DVQMQQPGPELVKPGASLKMSCKASGYSFTGYNMHWVKQSHGKSLEWIGYIDPYSGATSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001GB-00020649.
2002GB-00015212.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22; 196pp; English.
                                                                                                                                                                                  80.3%;
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                                                                                                                                           Score 520.5; DB 6
Pred. No. 2.6e-36;
3; Mismatches 10
                                                                                                                                                                                                                     6
                                                                                                                                                                                                             Length
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RESULT 13 ADC27445

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Matches
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Best Local
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(1) a recombinant nucleic acid comprising at least one sequence selected
from the group consisting of ADC79233, ADC79235, ADC79235, ADC79236,
ADC79237 and ADC79238; (2) a vector comprising the recombinant nucleic
acid; (3) a host cell; (4) a pharmaceutical composition; (5) preventing
or treating CA 125 tumour antigen-associated disease in a mammal; and (6)
negatively modulating a CA 125 tumour antigen in a mammalian cell. A
modulator capable of negatively modulating a CA 125 tumour antigen has
cytostatic activity, and can be used in gene therapy. The modulator
recombinant nucleic acid, vector or host cell can be used for preparing a
composition for preventing or treating CA 125 tumour antigen-associated
disease in a mammal. The present sequence is used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CA 125
CA 125
                                                                                                                                                                                                                                                                                                                                                       Sequence 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New modulator capable of negatively modulating a CA 125 tumor antigen in a mammalian cell, useful for preparing a composition for preventing or treating CA 125 tumor antigen-associated disease in a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2002; 2002US-0363306P.
28-FEB-2003; 2003CA-02420494.
                                                                                                                                                                                                                                                                                                                                                                                                                  of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a modulator capable of negatively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 29C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-722323/68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2003; 2003WO-CA000341.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anti-CA125 scFvs VK-8-1.9 amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JAN-2004
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                                                 61 SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51
                                                                                                                                                                                                                                       96;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour antigen-associated disease; cytostatic; gene therapy.
                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                               EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                   QVQLQESGPELVKPGASVKISCKASGYTFTDYNMHWVKQSHGKSLEWIGYIYPYNGDTGY
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                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                          B.
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                                                                                                                                                                                                                                   11;
                                                                                                                                                                                                                                   Score 518.5; DB 7
Pred. No. 4.2e-36;
1; Mismatches 11
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                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                   Gaps
118
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RESULT 14
ABP96756
01 X 5 X F X F X F X F X F X F X X F F F X F F F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X F X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes an antibody (1) that competitively inhibits binding of TMEEFF2#19 to TMEEFF2. Also described: (1) a paramaceutical composition comprising the antibody and a carrier; (2) detecting a prostate cancer cell in a biological sample from a patient by contacting the biological sample with the antibody; (3) inhibiting proliferation of a prostate cancer-associated cell by contacting the cell with the antibody; and (4) treating prostate cancer with an antibody to TMEEFF2. (1) has cytostatic activity and can be used in vaccines. The antibody, composition and method are useful for treating prostate cancer, e.g. primary prostate cancer, metastatic prostate cancer, locally advanced prostate cancer, androgen independent prostate cancer, prostate cancer that has been treated with neoadjuvant therapy, or prostate cancer that is refractory to treatment with neoadjuvant therapy. The present sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                         ABP96756
                                                                          ABP96756 standard; protein; 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-2002; 2002US-0362837P.
27-DEC-2002; 2002US-0436812P.
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cytostatic; vaccine; primary prostate cancer; metastatic prostate cancer;
locally advanced prostate cancer; androgen independent prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2003-756783/71.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                              117
                                                                                                                                                                                                                                                                 SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS
                                                                                                                                                                                                                                                                                                                                                 BIQLQQSGPELMKPGASVKISCKASTYSFTRYFMHWVKQSHGESLEWIGYIDPFNGGTGY
                                                                                                                                                                                                                                                                                                                                                                                                        EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 14; 51pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOTECHNOLOGY INC.
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\far D, Powers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 517; DB 7;
Pred. No. 2.8e-36;
                                                                                AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Caras I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
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The present invention describes a polypeptide sequence comprising part or all of the primary structural conformation of one or more thyrotropin (TSH) receptor epitopes with which autoantibodies and/or lymphocytes co produced in response to a TSH receptor interact. Also described: (1) one CC lymphocytes interact, as with the polypeptide sequence described above, CC (2) a method of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a cc subject suspected of suffering from, susceptible to, having or recovering from subject suspected of suffering from, susceptible to, having or recovering receptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH or naturally produced antibodies to the TSH receptor; and (4) a combination comprising the binding partner agents capable of stimulating thyroid tissue, and/or tissue containing a TSH receptor, for simultaneous, separate or sequential use in stimulating thyroid tissue, and/or tissue containing a TSH receptor. The specific binding partner is useful for the manufacture of a medicament for stimulating thyroid tissue containing a TSH receptor. The specific binding partner is useful for the manufacture of a medicament for stimulating thyroid tissue or invention can be used for treating an autoimmune disease associated with a immune reaction to a TSH receptor. The specific binding partner is useful for the manufacture of a medicament for stimulating thyroid tissue or invention and ACC44915 and ABP96719 to ABP967070 represent TSH receptor antibody VH candulfication of the present invention
                                    exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide sequence having part or all of the primary structural conformation of one or more TSH receptor epitopes, useful for treating an autoimmune disease associated with an immune reaction to a TSH receptor, e.g. thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 67; Fig 14; 196pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ACC44911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-AUG-2001; 2001GB-00020649
01-JUL-2002; 2002GB-00015212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Thyrotropin receptor; TSH receptor; epitope region; antibody; autoantibody; autoimmune disease; thyroid tissue; cytostatic; gene therapy; immune reaction; thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-290051/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-AUG-2002; 2002WO-GB003831.
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Sequence 214 AA;

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                                                                                        Matches
                                                                                                             Query Match
                                                                                                   Local
                 61
                                                                                        97;
                                                            1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                  Similarity
SQKFKGKATLTVDKSSSTAYMHINSLTSEDSAVYYCARRGNF-PYYFDYWGQGTTLTVSS
                                    DVQLVQSGPELVKPGASVKMSCKASGYSFTGYNMHWVKQSHGKSLEWIGYIDPYNGATSY
                                                                                       Conservative
                                                                                              79.7%;
80.8%;
                                                                                   Score 516.5; DB 6
Pred. No. 5.6e-36;
1; Mismatches 11
                                                                                                           6,
                                                                                     Indels
                                                                                                         Length
                                                                                                           214;
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                                                                                  Gaps
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RESULT 15
ABP96755
The present invention describes a polypeptide sequence comprising part or CC all of the primary structural conformation of one or more thyrotropin CC (TSH) receptor epitopes with which autoantibodies and/or lymphocytes CC produced in response to a TSH receptor interact. Also described: (1) one CC lymphocytes interact, as with the polypeptide sequence described above; CC lymphocytes interact, as with the polypeptide sequence described above; CC (2) a method of screening for autoantibodies or lymphocytes produced in response to a TSH receptor in a sample of body fluid obtained from a CC subject suspected of suffering from, susceptible to, having or recovering from autoimnune disease associated with an immune reaction to a TSH receptor; (3) a binding partner for a TSH receptor, which is capable of binding partner does not comprise TSH or naturally produced antibodies to the TSH receptor; and (4) a combination comprising the binding partner CC and/or tissue containing a TSH receptor, for simultaneous, separate or sequential use in stimulating thyroid tissue, and/or tissue containing a TSH receptor. A receptor has specific binding partner in the used for treating an autoimmune disease associated with an immune reaction to a TSH receptor. The specific binding partner is cuseful for the manufacture of a medicament for stimulating thyroid tissue or tissue containing a TSH receptor, and for treating thyroid cancer. CC ACC44974 to ACC44930 to ACC44931 en and partner and for treating thyroid tissue or tissue containing a TSH receptor, and for treating thyroid cancer. CC and Accadas and Accadas and Accadas endicament for stimulating thyroid tissue or tissue containing a TSH receptor, and for treating thyroid cancer. CC and Accadas and Accadas endicament for stimulating thyroid tissue or tissue containing a TSH receptor, and for treating thyroid cancer. CC and Accadas endicament for stimulating thyroid cancer. CC and Accadas endicament for stimulating thyroid cancer. CC and Accadas endicament for the TSH receptor antibody W
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New polypeptide sequence having part or all of the primary structural conformation of one or more TSH receptor epitopes, useful for treating an autoimmune disease associated with an immune reaction to a TSH receptor,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Smith BR, Furmaniak J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-AUG-2001; 2001GB-00020649.
01-JUL-2002; 2002GB-00015212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thyrotropin receptor; TSH receptor; epitope region; antibody; autoantibody; autoimmune disease; thyroid tissue; cytostatic; gene therapy; immune reaction; thyroid cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e.g. thyroid cancer.
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Query Match

Score 516.5;

DB 9

Length 214;

Sequence 214 AA;

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                                                                                                                                                Best Local Similarity 80.8%; Matches 97; Conservative 1
                 61 SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNF-PYYFDYWGQGTTLTVSS 119
61 NQKFEDKATLTVDKSSSTAYMQLNSLTSEDSAVYYCARRWDWDPYAMDYWGQGTSVTVSS 120
                                                                       1 DVQLVQSGPELVKPGASVKMSCKASGYSFTGYNMHWVKQSHGKSLEWIGYIDPYNGATSY
                                                                                              1 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                                                Pred. No. 5.6e-36;
1; Mismatches 11;
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Search completed: December 29, 2004, 17:57:23
Job time: 84.7906 secs

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Minimum
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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       EIQLQQSGPELVKPGASVKV......GNFPYYFDYWGQGTTLTVSS
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Copyright (c) 1993 - 2004 Compugen
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| ALIGNMENT | \$38565<br>\$37267<br>\$37267<br>\$20640<br>\$22769<br>\$PH0974<br>\$PH0974<br>\$PH0974<br>\$PH0975<br>\$53751<br>\$F10084<br>\$MHMSB1<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4808<br>\$PC4 |
| MENTS     | Ig heavy chain V r   |

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C; Pate: Us-now ALTERIOR C; Pate: Us-now ALTERIOR C; Pate: Us-now ALTERIOR C; Pate: Use C; Pate: Use C; Pate: D.M.; Rees, A.R.

J. Immunol. 141, 1745-1753, 1988
A; Title: V region sequences of anti-DNA and anti-RNA autoantibodies from NZB/NZW F-1
A; Reference number: A30502; MUID:88315787; PMID:2457627
A; Accession: F30502
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-119 < EIL-
C; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 15-98/Domain: immunoglobulin homology < IMM>
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F;34-117/Domain:
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H32513
R;Kofler, R.; Strohal, R.; Balderas, R.S.; Johnson, M.E.; Noonan, D.J.; Duchosal, M.A.;
J. Clin. Inwest. 82, 852-860, 1988
A;Reference number: A94689; MUID:88331394; PMID:3138286
A;Accession. H3251.
                                                                                                                                                                                                                                                                                                                        RESULT 2
F30502
Ig heavy chain V region (A52) - mouse
Ig heavy chain V region (A52) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 03-Nov-1988 #sequence_revision 03-Nov-1988 #text_change 21-Jan-2000
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A; Residues: 1-137 < KOF>
A; Residues: 1-137 < KOF>
A; Cross-references: GB: M20831; NID: g196949; PIDN: AAA38848.1; PID: g196950
C; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
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Best Local S
Matches 101
Query Match
Best Local Similarity 82.8
Matches 101; Conservative
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84.9%;
                         80.0%;
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Pred. No. 1.9e
6; Mismatches
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      Score 518.5; DB 2
Pred. No. 8.2e-39;
5; Mismatches 9
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A; Molecule type: mRNA
A; Residues: 1-128 < RUF:
C; Superfamily: immunog:
C; Keywords: heterotetr;
F; 19-102/Domain: immuno
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A;Title: Heavy and light chain variable region sequences a A;Reference number: A38740; MUID:91177923; PMID:1706720
A;Accession: C37267
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C37267
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J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences at A;Reference number: A38740; MUID:91177923; PMID:1706720
A;Accession: 137267
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A; Residues: 1-128 < RUF >
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C;Date: 18-Oct-1991
C;Accession: I37267
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Best Local S
Matches 96
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                                                                                                                             Superfamily: immunoglobulin V region; immunoglobulin Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                             Status: preliminary; not compared with conceptual
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jSpecies: Mus musculus (house mouse)
jDate: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change
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Best Local Similarity
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Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change
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                                                       Conservative
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                                                                  78.0%;
78.0%;
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79.7%;
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                                                  Score 505.5; DB 2
Pred. No. 1.2e-37;
7; Mismatches 15
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Pred. No. 8.2e-38;
5; Mismatches 15
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C;Keywords: necer
F;19-100/Domain:
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F37266
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A;Title: Heavy and light chain variable region sequences a
                                                                                                                                                                                                                                                                                                                                                      Ig heavy chain V region (Py2) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 18-Oct_1991 #sequence_revision 18-Oct-1991 #text_change
                                                                                                                                                                 C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-121 < RUF>
                                                                                                                                                                                                                                       A; Status: preliminary; not compared with conceptual translation
                                                                                                                                                                                                                                                           A; Reference number: A38740; MUID: 91177923; A; Accession: F37266
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C; Superfamily: immunoglobulin V region; immunoglobulin
C; Keywords: heterotetramer; immunoglobulin
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C;Accession: A27609
R;Klein, D.; Nietupski, J.; Sirli
J. Immunol. 140, 1676-1684, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RASSULT 5
RAT609
RAT609
Ig heavy chain precursor V region (129) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 15-Dec-1988 #sequence_revision 30-Jun-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-139 < KLE>
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A;Reference number: A27609; MUID:88154467; PMID:3126234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Genetics:
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VQLQQSGPELVKPGASVKISCKTSGYTFTEYIIHWVKQSHGKSLEWIGGINPNSG--GTN
                                   IQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGYS
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                                                                             Conservative
                                                                                                                                               immunoglobulin homology <IMM>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J.; Sirlin, S.; Stavnezer,
                                                                                         77.0%;
81.4%;
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80.08;
                                                                                                                                                               immunoglobulin
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                                                                       Score 499; DB 2;
Pred. No. 4.3e-37;
B; Mismatches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 503.5; DB Pred. No. 2e-37; O; Mismatches
                                                                                                                                                                                                                                                                         gion sequences and PMID:1706720
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                                                                                                        Length 121
                                                                       Indels
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QKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119

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64

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A;Molecule type: protein
A;Residues: 1-117 <KEH>
A;Cross-references: UNIPROT:P01756
A;Cross-references: UNIPROT:P01756
C;Comment: The glycosylated asparagine residue does not have the usual N-X-S/T context C;Comment: This protein binds dextran.
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: glycoprotein; heterotetramer; immunoglobulin
F;15-98/Domain: immunoglobulin homology <IMM>
F;15-98/Domain: immunoglobulin homology <IMM>
F;55-96/Disulfide bonds: #status predicted
F;55/Binding site: carbohydrate (Asn) (covalent) #status atypical
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A;Reference number: S05276
A;Accession: S05276
A;Molecule type: mRNA
A;Residues: 1-116,'T' <MET>
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C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1991 #sequence revision 30-Sep-1991 #text_change 23-Jul-1999
C;Accession: JL0044; S05276; S03305
R;Van Cleave, V.H.; Naeve, C.W.; Metzger, D.W.
J. Exp. Med. 167, 1841-1848, 1988
A;Title: Do antibodies recognize amino acid side chains of protein antigens independentl A;Reference number: JL0043; MUID:88258372; PMID:2455014
A;Accession: JL0044
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A; Residues: 1-117 < VAN>
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Best Local Similarity
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Best Local
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  SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS 119
                                                                                               EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
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                                                   EVOLOOSGPELVKPGASVKMSCKASGYTFTDYYMKWVKQSHGKSLEWIGDINPNNGGTSY 60
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80.7%;
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79.8%;
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                                                                                                                                                   Score 493; DB 1; Length 117; Pred. No. 1.4e-36; 9; Mismatches 13; Indels
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PN0444
Ig heavy chain V region
C; Species: Homo sapiens
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C;Species: Mus sp. (mouse)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Jun-2000
C;Accession: T01407
R;Takahashi, S.; Matsuura, Y.; Taniguchi, T.; Tamura, H.; Bitoh, S.; Onishi, S.; Yamamo Microbiol. Immunol. 36, 855-863, 1992
A;Title: Molecular analysis of mmunoglobulin heavy chain genes coding for idiotypic an A;Reference number: Z14317; MUID:93116638; PMID:1474935
A;Accession: T01407
                                                                                                                                                                                                                                                                                                                                      C; Superfamily: in C; Keywords: heter F; 19-102/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R. J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences and A;Reference number: A38740; MUID:91177923; PMID:1706720
A;Accession: A37267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ig heavy chain V region (Py20) - mouse
C;Species: Mus musculus (house mouse)
C;Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change 21-Jan-2000
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C;Superfamily: immunoglobulin V region; immu
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                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
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A; Residues: 1-140 < TAK>
                                                                                                                                                                                                                                                                                                                  Residues: 1-128 <RUF>
Residues: 1-128 <RUF>
Superfamily: immunoglobulin V region; immunoglobulin homology; Keywords: heterotetramer; immunoglobulin keterotetramer; immunoglobulin homology <IMM>
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Best Local Similarity
Matches 94; Conserv
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                                       TVSS 119
                                                                               NORFKGKATLTVDKSSSIAYMELRSLTSEDSAVYYCARRGPYGNYYNSYYFDYWGQGTTL
                                                                                                                          SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNF-----PYYFDYWGQGTTL 115
                                                                                                                                                                                                              EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOKEKGKATLTVDKSSSTAYMQLNSLTSEDSAVYYCAR--DYDMYFDVMGAGTTVTVSS
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                                                                                                                                                                                                                                                        Conservative
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75.8%;
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79.8%;
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                                                                                                                                                                                                                                                      9; Mismatches
                                                                                                                                                                                                                                                                        Score 491.5; DB 2;
Pred. No. 2.1e-36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 493; DB 2;
Pred. No. 1.7e-36;
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                                                                                                                                                                                                                                                                                              Length 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibody properties
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precursor (man)

human

(fragment)

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C;Superfamily: in
C;Keywords: hete;
F;15-98/Domain: i
F;22-96/Disulfide
    Ig heavy chain V region (Py54) - mouse C;Species: Mus musculus (house mouse) C;Date: 18-Oct-1991 #sequence_revision 18-Oct-1991 #text_change C;Accession: H37266
R;Ruff-Jamison, S; Campos-Gonzalez, R.; Glenney Jr., J.R.
J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences and ant
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C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; hybridoma; immunoglobulin F;15-98/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-150 < KRIL>
A; Cross-references: GB:LO2346
C; Superfamily: immunoglobulin V region; immunoglobulin
C; Keywords: heterotetramer; immunoglobulin
F;1-19/Domain: signal sequence #status predicted <SIG>F;20-150/Product: Ig heavy chain V region #status pred:
F;20-117/Domain: variable region <VRG>
F;34-117/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                RESULT
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A;Title: A general method for chimerization of monoclonal antiboa;Reference number: PN0444; MUID:93138402; PMID:1339379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: PN0444
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Best Local
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                                                                                                                                                                                                                                              SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS
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                                                                                                                                                                                                                  NQKFKGKATLTVDKSSSTAYMQLNSLTSEDSAVYYCAR--DRYWYFDVWGAGTTVTVSS
                                                                                                                                                                                                                                                                                            EVQLQQSGPELVKPGASVKMSCKASGYTFTDYYMKWVKQSHGKSLEWIGDINPNNGGTSY 60
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                                                                                                                                                                                                                                                                                                                                                                          Conservative
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79.8%;
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78.2%;
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                                                                                                                                                                                                                                                                                                                                                                                        Score 485; DB 1;
Pred. No. 7.1e-36;
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Pred. No. 3e-36;
9; Mismatches 16;
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    antibody properties
                                                                                21-Jan-2000
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    of anti
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A; Note: the authors translated the codon C; Superfamily: immunoglobulin V region; i C; Keywords: heterotetramer; immunoglobuli
                                                        A; Molecule type: mRNA
A; Residues: 1-122 < SHA>
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Ig heavy chain V region (anti-CD3) - mouse (fragment)
(;Species: Mus musculus (house mouse)
(;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 21-Jan-2000
(;Accession: PH0887
R;Shalaby, M.R.; Shepard, H.M.; Presta, L.; Rodrigues, M.L.; Beverley, P.C.L.;
J. Exp. Med. 175, 217-225, 1992
A;Title: Development of humanized bispecific antibodies reactive with cytotoxic A;Reference number: PH0885; MUID:92113462; PMID:1346155
A;Accession: PH0887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F;31-35/Region: complementarity-determining 1
F;50-66/Region: complementarity-determining 2
F;99-110/Region: complementarity-determining 3
F;99-106/Region: D region
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MO1. Immunol. 27, 463-470, 1990

A;Title: Variable region primary structures of monoclonal anti-DNA autoantibodies from A;Reference number: PL0198; MUID:90309768; PMID:2114528

A;Accession: PL0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:X53641; NID:g50193; PIDN:CAA37692.1; PID:g930139 C;Superfamily: immunoglobulin V region; immunoglobulin homology F;15-98/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              anti-DNA autoantibody BV16-19, heavy chain V region - mouse (fra C;Species: Mus musculus (house mouse)
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: PL0200
                                                                                                                                                                                                                                                          RESULT 15
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A; Residues: 1-118 < SMI>
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A;Status: preliminary; not compared with A;Molecule type: mRNA
A;Residues: 1-121 <RUF>
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C;Keywords: heterotetramer; ii
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                  SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCAR--RGNFPYYFDYWGQGTTLT 116
                                                                                                                                                                                                                                                                                                                                                                                                                              EIQLQQSGAELVKPGASVKISCKASGYSFTGYNNNWVKQSHGKSLEWIGNINPYYGGTSY
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79.7%;
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immunoglobulin
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Pred. No. 1.1e-
8; Mismatches
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Pred. No. 1.6e-35;
B; Mismatches 15
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Result
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Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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                                           Score
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seq length: 2000000000
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Match
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1: uniprot_sprot:*
2: uniprot_trembl:*
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Gapop 10.0 , Gapext 0.5
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648
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Copyright (c) 1993 - 2004 Compugen Ltd.
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    DB
  Q90XF0
Q7TMK1
Q920E8
Q650A7
AAH1535
HV12 MOUSE
Q8VCV5
HV13 MOUSE
Q91XF9
Q91XF9
HV15 MOUSE
Q924R8
Q924R8
Q924R7
HV14 MOUSE
Q924Q7
HV14 MOUSE
Q924Q7
HV14 MOUSE
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Q924R8
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|---|--|---|
| RESULT 2 Q7TMK1 ID Q7TMK1; PRELIMINARY; PRT; 470 AA. AC Q7TMK1, PRELIMINARY; PRT; 470 AA. DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update) DT 01-OCT-2003 (TrEMBLrel. 26, Last annotation update) DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update) DB Hypothetical protein AI324046. GN Name=AI324046; GN Name=AI324046; GN Name=AI324046; OS Mus musculus (Mouse). OC Ebkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleo. OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinau. OX NCBI_TaxID=10090; | AA.  update) on update) ertebrata; Euteleo i; Muridae; Murina elsch E.; DDBJ databases.  DDBJ databases.  A47E4C CRC64; DBB 2; Length 117; 2e-43; Indels s 12; Indels NMYWVKQSHGKSLEWIGY                             s 12; TMKWVKQSHGKSLEWIGD YMKWVKQSHGKSLEWIGD YMYYCAR-DKDYYFDYWG  | 32 437.5 67.5 145 2 0924Q9  33 437.5 67.5 145 2 0924R3  34 437.5 67.5 145 2 099125  35 437.5 67.5 473 2 099125  36 436.5 67.4 145 2 0924P7  36 436.5 67.4 145 2 0924P7  37 436 67.3 614 2 077MT6  38 434.5 67.1 143 2 0924Q5  39 434.5 67.1 143 2 0924Q5  40 434 67.0 140 1 HV02_MOUSE  41 433 66.8 146 2 0924Q3  42 432.5 66.7 143 2 091VA2  43 432.5 66.7 143 2 0924Q0  44 432.5 66.7 143 2 0924Q0  44 432.5 66.7 143 2 0924Q0  44 432.5 66.7 143 2 0924Q0  45 432 66.7 146 2 0924Q0  46 432 66.7 146 2 0924Q0  47 432 66.7 146 2 0924Q0  48 432 66.7 146 2 0924Q0  49 44 432 66.7 146 2 0924Q0  49 49 49 49 49 49 49 49 49 49 49 49 49 4 |
| , P<br>25, Cre<br>25, Lag<br>26, Lag<br>26, Lag<br>24046.<br>324046.  | ARY; PRT; el. 13, Created) el. 13, Last sequel. 26, Last anno chain V-D-J regil Chordain V-D-J regil Chordain y-D-J regil Chordain y-D- | 460220000000000000000000000000000000000   |
| date)<br>update)<br>ebrata; Euteleostomi;<br>Muridae; Murinae; Mus.   | date) update) gment). ebrata; Buteleostomi; muridae; Murinae; Mus.  Ch E.; J databases.  J databases.  1 databases.  1; 12; Indels 2; Gaps 1; 13; Indels 2; Gaps 60  | Q924q9 mus musculu Q924r3 mus musculu Q99125 mus musculu Q88172 mus musculu Q924p7 mus musculu Q71mt6 mus musculu Q924q5 mus musculu Q924q5 mus musculu Q924q3 mus musculu Q91va2 mus musculu Q91va2 mus musculu Q924q3 mus musculu Q924q3 mus musculu Q924q3 mus musculu Q924q8 mus musculu Q924q8 mus musculu   |

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RESULT 3
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ID Q920
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Expression driven by an MMTV-LTR enhancer;

RX MEDLINE=22388257; PubMed=12477932;

RX MEDLINE=22388257; PubMed=12477932;

RX Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G.,

RA Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetcow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko I., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Bischapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Strapleton M., Soares M.B., Bonaldo M.F., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., MoEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Villalon D.K., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Jones S.J. Mayrra M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR007110; Ig-like.
InterPro; IPR003597; Ig_cl.
InterPro; IPR003597; Ig_MHC.
InterPro; IPR003596; Ig_MHC.
InterPro; IPR003596; Ig_v.
Pfam; PF07654; C1-set; 3.
Pfam; PF00767; Ig; 1.
SMART; SM00406; IGy; 1.
SMART; SM00406; IG, ILIKE; 4.
PROSITE; PS500290; IG_MHC; UNKNOWN 1.
                                                                                     Q920E8;
01-DEC-2001
01-DEC-2001
01-OCT-2003
                                                                                                                                                                                                               Q920E8
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SEQUENCE FROM
STRAIN=CZECH
                                                     Pterin-mimicking anti-idiotope heavy
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Expression driven by an MMTV-LTR (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; BC055910; AAH55910.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCAR---RGNFPYYFDYWGQGTTLTV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NQXFXGKATLTVDKSSSTAYMELNSLTSEDSAVYYCARYYYSGSY-WYFDVWGAGTTTVTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EVOLOQSGPELVKPGASVKISCKASGYTFTGYYMHWVKQSHGKSLEWIGLVNPSNGDTSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al protein.
                               (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
region
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ilarity 78.7%;
Conservative 1
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Pred. No. 1.9e-41;
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enhancer.;
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ACCORDERATE RAPARA RAPA
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RC Expression driven by an MMTV-LTR enhancer;

RX MEDINIB=22388257; PubMed=12477932;

RX MEDINIB=22388257; PubMed=12477932;

RX MEDINIB=2388257; PubMed=12477932;

RX Alusner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Heich F.,

RA Altschul S.F., Zordan H., Moore T., Max S.I., Wang J., Heich F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Wullahy S.J.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Bosak S.A., McTwan P.M., Sodergren B.J., Lu X., Gibbs R.A.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Whiting M., Madan A., Young A.C., Shevchao M.C.,

RA Blakeslev R.W., Touchman J.W., Green R.D., Dickson M.C.,

RA Blakeslev R.W., Touchman J.W., Green R.D., Dickson M.C.,
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HSSP; P01751; INQB.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
Pfam; PF00047; Ig; 1.
SMART; SM00406; IGv; 1.
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NCBI_TaxID=10090;
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Q6PJA7;
05-JUL-2004
05-JUL-2004
                                                                                                                        (TZYWILE)... Marra M.A.;
Jones S.J., Marra M.A.;
"Generation and initial analysis
"Generation and sequences.";
and mouse cDNA sequences.";
Acad. Sci. U.S.A. 99
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SEQUENCE
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        TISSUE=Mammary
                                                                                SEQUENCE FROM
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Mammalia; Eutheria;
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Submitted (SEP-2000)
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EMBL/GenBank/DDBJ
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RC STRAIN=Czech II, TISSUE=Mammary tumor;

RX MEDLINE=22388257; PubMed=12477932;

RX MEDLINE=22388257; PubMed=12477932;

RX Altausher R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Klausher R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Klausher R.D., Collins F.S., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Frange C.,

RA Hopkins R.F., Jordan R., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Hopkins K.F., Jordan R., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RA Raha S.S., Mozny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

RA Pahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.E.,

Morne S.J., Marra M.A.;

"Generation and intital analysis of force than 15 000 full loreth human."
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InterPro; IPR007110; Ig-11ke.
InterPro; IPR007110; Ig-11.
InterPro; IPR003597; Ig-c1.
InterPro; IPR003006; Ig-MHC.
InterPro; IPR003906; Ig-MHC.
InterPro; IPR003906; Ig-V.
Pfam; PR00407; Ig-2.
SMART; SM00409; IG-2.
SMART; SM00407; IGC1; 3.
SMART; SM00407; IG-11KE; 4.
PROSITE; PS50835; IG-LIKE; 4.
PROSITE; PS50839; IG-MHC; UNKNOWN-1.
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02-MAR-2004 (TrEMBLrel.
02-MAR-2004 (TrEMBLrel.
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Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                           Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (DEC-2001) to the EMBL; BC018535; AAH18535:1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH18535;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH18535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hypothetical SEQUENCE 4
                                                       mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SQKFKGKATLTVDKSSSTAYMHLNSLTSBDSAVYYCAR----RGNFPYYFDYWGQGTTLT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VSS
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472 AA; 5
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larity 78.0%;
Conservative 1
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27,
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Pred. No. 3.1e-41;
0; Mismatches 13
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                             99:16899-16903 (2002)
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C -1- SIMILARITY: ...

AR PIR; A02039; MHNS4E.

BR HSSP; P01751; 1NCB.

InterPro; IPR003596; Ig_v.

Pfam; PF00047; ig; 1.

DR SMART; SM00406; IGv; 1.

DR PROSITE; PS50835; IG LIKE; 1.

DR PROSITE; PS50835; IG LIKE; 1.

DOMAIN 1 116 Ig-like.

FT DOMAIN 1 19-like.

DISULEDD 22 96 By similarity.

DISULEDD 25 55 N-linked (GlcNAc. ..) (complex).

117 112983 MW; 3CP0ACE4BE447E41 CRC64;

--- 493; DB 1; Length 117;

--- 493; DB 1; Length 117;

--- 493; DB 1; Indels 2;
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STRAIN=Czech II; TISSUE=Mammai STRAIN=Czech II; TISSUE=Mammai Strausberg R.;
Submitted (DEC-2001) to the ElemBi; BC018535; AAH18535:1; -Hypothetical protein.
SEQUENCE 472 AA; 52299 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOUSE
HV12 MOUSE
P01756;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUL-1986
21-JUL-1986
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Complete amino acid sequence of a mouse mu chain: heavy chain constant region domains."; Biochemistry 21:5415-5424(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE, AND CARBOHYDRATE-LINKAGE SITE ASN-55.
MEDLINE=83075344; PubMed=6816276;
Kehry M.R., Fuhrman J.S., Schilling J.W., Roger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein has also been determined.
-!- MISCELLANEOUS: This protein binds dextran.
-!- SIMILARITY: Contains 1 immunoglobulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ig heavy chain V region MOPC Mus musculus (Mouse).
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SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCARRGNFPYYFDYWGQGTTLTVSS:||||||||||||||::::|||||||
                                                                                                         EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
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                                                                                 EVQLQQSGPELVKPGASVKMSCKASGYTFTDYYMKWVKQSHGKSLEWIGDINPNNGGTSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SQKFKGKATLTVDKSSSTAYMHLNSLTSEDSAVYYCAR----RGNFPYYFDYWGQGTTLT 116
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(Rel. 01, Last sequence up)
(Rel. 44, Last annotation
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Pred. No. 3.1e-41;
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Best Local :
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EMBL; U59154; AAB02916.1; -.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig-v.
Pfam; PF00047; 1g; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
                                                                                                                  Hypothetical protein.
Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata,
Mammalia, Eutheria, Rodentia,
                                                                                                                                                       01-MAR-2002 (TrEMBLrel. 20,
01-MAR-2002 (TrEMBLrel. 20,
01-MAR-2004 (TrEMBLrel. 26,
                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=C3H/HeJ-lpr/lpr;

MEDLINE=96409289; PbbMed=8814271;

Wloch M.K., Alexander A.L., Pippen A.M., P
"Differences in V kappa gene utilization a
anti-DNA from C3H-lpr mice and lupus mice
Bux. J. Immunol. 26.2225-2233(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002
01-MAR-2002
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q8VIJ1;
                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                      Q8VCV5;
                                                                                                                                                                                                Q8VCV5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name≕J558;
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                                                                                                                                                                                                                                                               LTVSS 119
                                                                                                                                                                                                                                                                                                                  ETQLQQSGTELVKPGASVKISCKASGYSFTGYNMNWVKQSHGKSLEWVGDINPYYGGTRY
                                                                                                                                                                                                                                                                                                                                EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NQKFKGKATLTVDKSSSTAYMQLNSLTSEDSAVYYCAR--DYDWYFDVWGAGTTVTVSS
                                                                                                                                                                                                                                                                                                                                                                                               123
123 AA;
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                                                                                                                                                                                                                                                                                                                                                          75.8%; llarity 76.8%; Conservative
                                                                                                                                                                                              PRELIMINARY;
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Last sequence update)
Last annotation update)
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Last annotation updat
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Pred. No. 4.1e-41;
                                                                                                                 Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                              CC0037A806E9911E CRC64;
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and VH CDR3 sequence
with nephritis.";
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RESULT
HV13_MO
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    SEQUENCE.

(MEDLINE=80078170; PubMed=6765983;
Schilling J., Clevinger B., Davie J.M., Hood L.;
Schilling J., Clevinger B., Davie J.M., Hood L.;
Mamino acid sequence of homogeneous antibodies to
rearrangements in heavy chain V-region gene segmer
Nature 283:35-40(1980).

-!- MISCELLANEOUS: The sequences of 10 hybridoma r
bind dextran differ from that shown at 1-7 pot
which occur in the D and J segments.

-!- MISCELLANEOUS: This protein binds dextran.

-!- SIMILARITY: Contains 1 immunoglobulin-like dor
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Best Local S
Matches 91
                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPRO07110; Ig-like.
InterPro; IPR003597; Ig_c1.
InterPro; IPR003006; Ig_MHC.
InterPro; IPR003596; Ig_v.
Pfam; PF007654; C1-set; Z.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 4.
PROSITE; PS50835; IG_MHC; UNKNOWN_2.
-1-
-1-
                                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grinwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Tones S.I.
                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
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Submitted (DEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jones S.J., Marra M.A., "Generation and initial and mouse cDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; BC018455; AAH18455.
HSSP; P01810; 2FBJ.
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c. Natl. Acad. Sci. U.S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NQKFKGKATLTVDKSSNTAFMYLNNLTSEDSAFYYCAREW-YGAWFAFWGQGTLVTVSA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and initial analysis of more than 15,000
  MHMSJ5
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01, Last sequence update)
44, Last annotation updat
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76.5%;
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Pred. No. 2.8e
L4; Mismatches
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Sciurognathi; Muridae;
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                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                  Murinae;
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many
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of
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RESULT 11
Q91WR1
ID Q91WR
AC Q91WR
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DT 01-DE
DT 01-DE
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Best Local
Matches 9
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Matches 95
  01-DEC-2001
01-DEC-2001
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NON_TER
SEQUENCE
                                          Q91WR1
                                                                                                                                                                                                                                                                                   PIR; P33932; P33932.
HSSP; P01751; INQB.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                              Clemens A., Rademaekers A., Submitted (DEC-1997) to the EMBL; AJ225174; CAB65237.1;
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NON_TER
SEQUENCE
                                 Q91WR1;
                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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01-MAY-2000 (TrEMBLrel. 13, Last
01-CCT-2003 (TrEMBLrel. 25, Last
Immunoglobulin heavy chain V-D-J
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InterPro; IPR003596; Ig_v.
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITS; PS50835; IG LIKE; 1.
Direct protein sequencing; Immunoglobulin V DOMAIN 1 116 Ig-like.
                                                                                                                                                                                                                                                      Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
SROSITE; PS50835; IG_LIKE;
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                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
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95; Conser
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                                                                                                                                                 EIQLQQSGPELVKPGASVKVSCKASGYAFTNYNMYWVKQSHGKSLEWIGYIDPYYGDPGY
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                                                                                                                                      EVQLQQSGPELVKPGASVKMSCKASGYTFTDYYMKWVKQSHGKSLEWIGDINPNNGGTSY
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22
117
117 AA;
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117 t
  (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                  Conservative
                                            PRELIMINARY;
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                                                                                                                                                                                                                          13000 MW;
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                                                                                                                                                                                         74.8%;
79.8%;
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  19,
19,
Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                              Score 485; DB
Pred. No. 1.5e-
8; Mismatches
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Pred. No. 1.5e-
8; Mismatches
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By similarity.
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region (Fragment).
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                                                                                                                                                                                         DB 2;
.5e-40;
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.5e-40;
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RESULT 12
HV51 MOUSE
ID HV51 MOUSE
AC P06330;
DT 01-JAN-1988
DT 01-JAN-1988
DT 05-JUL-2004
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A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

A Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Balakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Balakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Balakesley R.W., Touchman J.W., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

"Generation and initial analysis of more than 15,000 full-length human

"Generation and initial analysis of more than 15,000 full-length human
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Best Local S
Matches 91
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InterPro; IPR007110; Ig-like.
InterPro; IPR003597; Ig cl.
InterPro; IPR003597; Ig MC.
InterPro; IPR003506; Ig MC.
InterPro; IPR003596; Ig V.
Pfam; PP07654; Cl-set; 2.
Pfam; PP07654; Cl-set; 2.
Pfam; PP00047; ig; 1.
SMART; SM00406; IGV; 1.
SMART; SM00406; IGV; 1.
PROSITE; PS50835; IG_LIKE; 4.
PROSITE; PS00290; IG MIC; UNKNOWN 2.
SEQUENCE 488 AA; 52964 MW; F1206
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SEQUENCE FROM N.A.
STRAIN=FVB/N; TISSUE=Kidney;
STRAIN=FVB/N; TISSUE=Kidney;
MEDLINE=22388257; PubMed=12477932;
MEDLINE=22388257; PubMed=12477932;
MEDLINE=20388257; PubMed=1247793;
MEDLINE=20388257; PubMed=1247793;
MEDLINE=20388257; PubMed=12477932;
MEDLINE=20388257; PubMed=1247757; PubMed=12477757; PubMed=12477757; PubMed=12
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Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Submitted (SEP
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c. Natl. Acad. Sci. U.S.A.'99:16899-16903(2002)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FROM N.A.
VB/N; TISSUE=Kidney;
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                                                                                                                                                                       STANDARD;
06, Created)
06, Last sequence up
44, Last annotation
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73.4%;
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F12068460B400B9D CRC64;
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Best Local S
Matches 93
                                                                                                                                                                                                                                                                                                                                                                                  Kozono Y., Kozono H., Azuma
Submitted (AUG-2001) to the
EMBL; AB067781; BAB63266.1;
PIR; F28833; F28833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created 01-DEC-2001 (TrEMBLrel. 19, Last se 01-OCT-2003 (TrEMBLrel. 25, Last an VH186.2-D-J-C mu protein (Fragment) Name=VH186.2-D-J-C mu;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=C57BL/6;
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SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE;
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Mus musculus (Mouse)
Bukaryota, Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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HSSP; P01751; 1NQB.
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Dildrop R., Bovens J., Siekevitz
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InterPro; IPR003596; Ig_v.
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PH1118;
PH1119;
PH1125;
PH1126;
PH1128;
PH1129;
PH1131;
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PH1114;
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1 98 V segment.
99 104 D segment.
105 118 J segment.
2 96 By similarity.
118 118
118 AA; 12934 MW; 94F7BEE4C762;
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77.5%;
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Pred. No. 2.2e-38;
; Mismatches 18
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Sciurognathi; Muridae;
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annotation update)
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; Murinae; Mus
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RESULT 14
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PIR; PH1147; PH1147.

PIR; PH1147; PH1149.

PIR; PH1150; PH1150.

PIR; PH1151; PH1151.

PIR; PH1152; PH1152.

PIR; PH1153; PH1153.

InterPro; IPR007110; Ig-like

InterPro; IPR003596; Ig-v.

PÉam; PF00047; ig; 1.

PMART; SM00406; IGv; 1.

PROSTTE; PS50835; IG_LIKE; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q925S2
Q925S2;
Q1-DEC-2001
Q1-DEC-2001
Q1-OCT-2003
                               Interro; .....
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
PROSITENCE 170 AA; 17978 MW;
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NON TER
SEQUENCE
                                                                                                                                                     Int. J. Radiat. Biol. Relat. EMBL; AR240167; AAK43732.1; ... HSSP; P01751; 1A6W.
                                                                                                                                                                                                                                         Cui D., Zeng G., Yan X., Li X., "Cloning of mouse genes related of the irradiated mice by treat
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN=BALB/c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                                                                                                   the same strain.";
Int. J. Radiat. Bi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               PubMed=11819679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=BALB/c
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InterPro; IPR003596; Ig_v.
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ir of intestinal epithelium after
Gastroenterol. 6:709-717(2000).
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Last sequence update)
Last annotation updat
Score 454;
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                                                                                                                                                                                                                                                                                                                        PIR; A02042; HVMSB1.
HSSP; P01751; 1NQB.
InterPro; IPR007110; 1
InterPro; IPR003596; 1
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
21-JUL-1986 (Rel. 01, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
1g heavy chain V region BCL1 precursor.
Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Simultaneous expression of immunoglobulin mu and delta heavy chains by a cloned B-cell lymphoma: a single copy of the VH gene is shared by two adjacent CH genes.",
Proc. Natl. Acad. Sci. U.S.A. 79:2996-3000(1982).
-I- SIMILARITY: Contains 1 immunoglobulin-like domain.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=8222262; PubMed=6806821; Knapp M.R., Liu C.-P., Newell N., Ward R.B., Tucker P.W., Strober S., Blattner F.R.;
                                                                                                                                                                                                                                                                                                                                                                                      EMBL; J00494; AAA38130.1;
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                                                                                                                     Cn 69.8%; Score 452; DB 1; Length 136; 1 Similarity 72.5%; Pred. No. 3.6e-37; 87; Conservative 11: Minner-1
                                                            3 QVXLQQSGPEVVRPGVSVKISCXGSGYTFTDYSMHWLKWMHAQSLEWIGIISTYDGNTNY
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